



THOMAS G. NEWMAN,
EDITOR.

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EDITORIAL BUZZINGS.

Select a few combs of well-sealed honey for winter stores, and take it from your good, white honey.

The Golden-Rod.—New York, by vote of its public schools, selected the golden-rod for its State flower last May.

Prospects for a Large Yield, in some places, are very good—but in many others they are not so good. Of the former, this is a representative report:

Bees in this part of the State are doing finely, and the prospect for a large honey-yield is very flattering. The season is at least two weeks ahead of last year.

CHAS. T. HENDERSON.

Lebanon, Ind., June 27, 1890.

Of the latter, the following letter will express the experience of many:

Bees have very suddenly come to a standstill in honey gathering. While we have a heavy bloom of white clover, and our hives are full of bees, I cannot see a bee to-day where I saw a hundred a few days ago, and they are idle at the entrance of the hive! So much for expectations! They have been doing reasonably well until the last three or four days.

We have been having a good deal of rain of late, but they seemed to be doing well between showers. We had a very heavy shower on the 21st inst. Since then we have had none;—the mercury every day running above 90 degrees, and it has put a quietus on the honey gathering. How long it will last remains, yet to be seen.

J. C. ARMSTRONG.

Bromley, Iowa, June 27, 1890.

It is too early to give anything satisfactory as to the prospect for a honey crop. Basswood promises well, but it is difficult to even "guess" now what we shall know in a few days more. If the demand for supplies means anything, it ought to be the largest crop for many years.

Brother Root, in the last issue of *Gleanings*, gives a statement of the sad condition of things in the supply department of his establishment—on account of the great and "unexpected rush for goods." A correspondent says some very severe things concerning Mr. Root and his clerks and managers. The correspondent was no doubt quite justified when he charged that "a base deception" had been played on him, when promising that the goods should be shipped the next day—when it was confessed that they were not shipped for seven days after that day.

This brought Brother Root up standing. He was astonished—bewildered—confounded! "John," his son-in-law, who took charge of all orders, was home sick for two weeks with a sprained ankle. Ernest stepped into the breach, and relying upon the promises of others, said that the goods should be shipped the next day. Every one who knows Ernest will say that he intended to do as he agreed—but, alas, it is too often the case, that errors come even when the best efforts are made to prevent them—and in the present rush who can prevent mistakes, errors and delays! No one!!

We have complaints on our desk against four different supply dealers. One of the complainants is so very much wrought up against one of the largest and most prompt supply dealers of America, that he wants to pay for an advertisement in the BEE JOURNAL to state his grievance, and warn others against doing business with him.

We know that the one complained of is doing all he can to fill orders, and is running his factory day and night to try to satisfy his customers, but he is hopelessly behind.

Here, in our supply house, we are in a very similar condition. Some things we cannot supply promptly, particularly the Sections, on which we are nearly 400,000 behind our orders. We are getting all we can daily, and ship them instantly, as soon as they come from the factory. One of our customers, who had an order for sections and other goods waiting, complained bitterly because a neighbor sent for foundation and received his goods the next day. He forgot that his order was all held for the Sections, which must take its turn, and was sent as soon as that turn came.

When the honey is going to waste because proper receptacles are not at hand, it is hard for bee-keepers to be patient—and we do not blame them except for not ordering earlier, and getting everything needed ready for use before the honey season commenced—as we have so often advised.

Now, orders are coming by telegraph, for Sections, etc., to be sent by express at once. We are very sorry to have these good people disappointed, but it is inevitable. Everything in stock we ship promptly and pride ourselves in doing it, but when we depend on others for stock not on hand, we are at their mercy.

If there is any consolation in the fact that all supply dealers are in the same condition, that consolation may be administered—"for misery loves company." If any one cannot wait their turn, let them call for the return of their money—here, at least, it will be instantly returned, and that solution of the difficulty will be most welcome to us, for it will be a great relief not to feel compelled to further disappoint our friends—after having done all we could to accommodate them.

The Lewis fire, just at the beginning of the season, has crippled all supply dealers, and, in a great measure, is responsible for many of the delays.

Do Not Send samples of the so-called "foul brood," or any diseased bees through the mails. It is very dangerous, and there is no excuse for doing it. Postal clerks and others handling it may be careless, and much damage may result. We fully endorse the following from *Gleanings* of June 15:

Please do not send any suspicious comb through the mails, or in any other way. Let all the bee-papers echo the request. If you are afraid it is in your hives, examine the description in our text-books; then if you are not satisfied, state the matter plainly; write to us or some other competent authority. Meanwhile take every precaution against spreading. It should be treated like scarlet fever, yellow fever, cholera, etc. Stamp it out of existence; and by no manner of means give a chance of spreading it by your own thoughtlessness or foolishness.

N. N. Betsinger, a bee-keeper of note at Marcellus, N. Y., has just been sentenced to 15 years in the State's Prison, for immorality. He was a prominent citizen, a preacher, and a leader in the church. A Marcellus paper reports the matter thus:

—Against Mr. Nicholas N. Betsinger, of Marcellus, the Grand Jury reported 4 indictments under seal—2 for abduction and 2 for rape. He was brought into court in the afternoon, and through his counsel, ex-District Attorney Lawrence T. Jones, pleaded not guilty, with the privilege of moving to set aside the indictment.

He was afterwards tried and condemned, and is now endeavoring to get a new trial. If guilty, he certainly deserves the sentence—for ruining two orphan girls (9 and 13 years of age) is no small crime, especially for one who so ostentatiously paraded his religion at all times. When the girls escaped to a neighbor's house, and told their "tale of woe," indignation ran high, and it was all the police could do to save his life. They destroyed his honey-house and injured some other buildings.

The Honey Almanac is just the thing to use to sell your new honey, as soon as it is taken from the hives. Just order some printed, stating your crop of new honey is ready for delivery. It will go like hot cakes! See prices on page 437.

GLEAMS OF NEWS.

Bees and the Mexican Indians.

—M. T. Vanderpool, in the *Youth's Companion*, lately gave the following account of the bees in Mexico, as related by an Indian boy :

The country traversed was much the same as on the previous day, groves of noble timber alternating with tracks of open grassy country. Shortly after noon we crossed an elevated ridge of dry, stony soil, where all the hillocks and knolls were crowned with very thorny cactus, of the variety known as the candelabra, with branched clumsy arms often reaching a height of eight feet.

Shortly afterward Pablo came riding up to report to us that the band of Indians was following on our trail. I sent another of the Gauchos back to observe their movements, and took the boy into the cart.

His talk, in an odd mingling of Spanish and the native Indian tongue, was very interesting. After he had told what he knew about the Indians, we questioned him about the bees which we saw, whose ways were entirely new to Mellen and myself.

"This bee builds its nests upon the ground and upon flat stones, senores," he said, "and it is called the *alpa-millsqui*." We presently got out of him that *millsqui* is the word for honey. We asked him how the honey was collected.

"With a little hollow reed, senores," said he. He illustrated the process, jumping down from the cart and cutting a grass stalk which he quickly converted into a hollow tube about a foot in length. Then, with a sharpened stick he punctured a hole in one of the honey-combs. Introducing the end of the little tube, he proceeded to suck up the honey into his mouth.

"Bueno!" he exclaimed, smacking his lips, "it is *cyrobana*." He meant a kind of honey, collected from a very sweet flower in the Chaco, called the *ybirapaye*.

"But, Pablo," said Mellen, "that does very well for you, but if you were collecting it for me, it would not be quite nice."

"Ah, but I would not take it in my mouth, senor!" cried the bright lad. "I would use a larger, longer reed, and only draw it up into the reed, then blow it into a dish."

He pointed out another bees' nest to us, consisting of a pear-shaped mass of cells, attached to the trunk of a large tree, the bark of which is used for tanning hides. This bee Pablo called a *mozo-mozo*, pronouncing the word in a low tone, in imitation of the hum of the insect.

A few moments later he showed us still another larger bee which he called *toisimi*, "the best bee," he said, "of all those in the Chaco." This bee lays up large stores of honey, making use of a particular kind of cactus, called the *cardon*, as a hive. The *cardon* cactus has a very thick trunk, generally hollow, often a foot or more in diameter. Inside these drum-like cavities the *toisimi* places its hoard of sweets.

At about two o'clock we halted near a clump of three short, clumsy cacti to rest the animals and take lunch. Mellen and Metorras came back and joined us as we were feasting upon honey and parched corn beside the covered cart.

Supply Dealers who desire to handle a good Bee-Veil, should write for our dozen rates on the "Globe" Bee-Veils, to sell again.

The Aims and Objects of beekeepers' societies are thus set forth by Mr. C. N. Wilson, in the *Rural Californian*. He strongly advocates the maintenance of such societies, and shows that it is to the advantage of all honey-producers to aid them in every possible way. He says :

There is a large field to occupy, and a growing industry to build up and perpetuate. Now, let us organize, get well acquainted, and when our honey is ready for market, do the work in a good, business-like manner. There is an impression abroad that 1890 is to be an exceptionally good year, and we can say that an unusually large number of persons have begun the business this season. Most of them are anxious to get what information they can as to the business, and a good association can help them very materially in many ways. One of the principal things to be considered is the proper disposal of the honey after it is produced. Serious hurt is done to the industry by inexperienced persons trying to sell their honey on a poor market, or in poor condition. An association can get and give information on these two points alone that would repay any trouble or expense that would be incurred in its information.

Doolittle's Book on Queen-Rearing has received many encomiums, but perhaps none of them have been more well-put and enthusiastic than the following, which, though written as a "private" letter, he will, we think, excuse the liberty we take of printing here. It is from Mr. Joseph G. Steer, of Tacoma, O. He says :

Mr. Doolittle has conferred upon us the greatest boon since the advent of the frame hive, in his book on Queen-Rearing. I have long been his disciple, but his latest grand discovery has quite taken us off our feet. I read his book, and at once pronounced it "fiction," which gave me pain, but I thought better of it, and said that I would see. I began, and with the book before me, I endeavored not to omit a detail. I had proceeded so far as to get hatched queens in the upper story of 5 colonies out of 7 that I tried (the other 2 are not yet hatched), when I felt that I could not wait to see the end, to speak of the gratitude I feel toward him, for all that he has done for us, and to offer a sincere apology for the wrong I did him in my heart. Doubtless he has received thousands of letters, thanking and congratulating him, and I am afraid that mine comes a little late. Why, to say nothing of the grand process of queen-rearing he has given us, let me say that it is worth many times the cost of the work to be saved the torment of angry bees from queenless colonies—a point which has never been mentioned of the book.

Chapman Honey-Plant Seed.—This plant has been commended by some of the most experienced bee-keepers in America, as being "a most valuable acquisition to the list of bee-forage plants." The seed may be scattered in waste places, or it may be sown in drills or hills like onion seed. We can furnish the seed, post-paid, at the following prices: Single ounce, 40 cents; 4 ounces, \$1.00; 10 ounces, \$2.00; or one pound for \$8.00.

Clubs for anything in our Premium List may be for either of our JOURNALS, or for any number of either or both of them.

Our Advertisers Speak from Experience.

The following are a few of the many unsolicited words of Appreciation from those who have TESTED the Bee Journal for advertising :

An order from Algeria, Africa, says our address was obtained from the BEE JOURNAL.—H. K. & F. B. THURBER, N. Y.

Our Advertisement in the BEE JOURNAL is the best investment we ever made.—J. OATMAN & Co., Dundee, Ills.

Good Medium.—The BEE JOURNAL is a good advertising medium, and the charges are reasonable.—T. J. WARD, St. Mary's, Ind.

Quick Returns.—I get the quickest return from an advertisement inserted in the AMERICAN BEE JOURNAL of any paper I ever advertised in.—HENRY ALLEY, Mass.

Pays Well.—I thought I had Queens enough on hand to safely advertise to "supply all orders by return mail," but as soon as I advertised in the BEE JOURNAL, I not only sold all I had on hand, but orders came in faster than I could rear them. The money invested in that advertisement paid me better than any I ever invested in anything else.—I. R. GOOD, Nappanee, Ind.

The Bee Journal does its advertising wonderfully well. It brought to me responses from Canada to the Gulf of Mexico, and from the Alleghanies to the Rocky Mountains.—W. M. ROGERS, Shelbyville, Ky.

Having advertised in the AMERICAN BEE JOURNAL quite extensively for years, I would say (without solicitation) that it sold more queens for me than any other three papers I have ever tried.—L. J. DIEHL, Butler, Ind.

I am much pleased with the result of my advertisement in the AMERICAN BEE JOURNAL. I have sold out completely, and sent back about \$50 for which I had no goods to send.—M. P. CADY, Poy Sippi, Wis.

I now have all the orders I can fill this season. Most of my customers say that they saw my advertisement in the AMERICAN BEE JOURNAL.—H. G. FRAME, North Manchester, Ind.

During the year 1888, we had an advertisement running in the American Bee Journal, and we had the same in several Daily and Weekly papers, but to our surprise we received more than double the number of responses from the advertisement in the American Bee Journal, than from all our others combined.

The fact that we are still receiving letters referring to our advertisement in the Bee Journal, shows that it is preserved and read long after it is received. Newspapers are read and thrown aside and that ends it, but the Bee Journal is preserved, and the advertisements are often noticed and bring responses long after they appeared in it.

We regard the American Bee Journal as a first-class advertising medium.

Cedar Rapids High-Speed Engine Co.,
HENRY RICKEL, President.

The July number of "The National Magazine," of Chicago, opens with an article entitled "Harvard University and Reform," by Chancellor Harkins, of the National University of Chicago, in which wisdom of President's Eliot's radical recommendations is forcibly maintained.

QUERIES REPLIES.

Making the Wood-zinc Queen-Excluding Honey-Boards.

Written for the American Bee Journal

QUERY 715.—1. What wood do you consider the best for rims of wood-zinc queen-excluders? 2. How should the corners of the rims be joined, to obtain the greatest strength? 3. In your opinion, is the break-joint feature worth retaining?—New York.

1. Pine or whitewood. 3. It is.—Mrs. L. HARRISON.

Here, again, I am "left." Ask Dr. Tinker.—J. M. HAMBAUGH.

1. We use slatted honey-boards with zinc. 3. I think so.—A. J. COOK.

1. Whitewood or basswood. 2. I simply nail them together. 3. Yes.—R. L. TAYLOR.

1. I have had no experience. 2. Dove-tailed. 3. With the wood-zinc honey-board, no.—A. B. MASON.

1. Anything light and tough. 2. Nailed. 3. I hardly know.—EUGENE SECOR.

1. Pine is good. 2. Halving together works well. 3. I do not use it.—G. M. DOOLITTLE.

1. Good pine will answer as well as any. 2. Nail them well at the corners. 3. No.—C. H. DIBBERN.

1 and 2. I have had but little experience. 3. I doubt the value of the break-joint feature.—C. C. MILLER.

1. Pine is the best I have used. 2. Toeing and grooved with saws and driven together makes a very strong corner. 3. I am using honey-boards with and without the break-joint feature, and can see no difference.—H. D. CUTTING.

1. What in the West is usually poplar. 2. That depends on the width and thickness of the stuff used. As good a way as any is to let the end-pieces lap over the ends of the side-pieces, or *vice versa*, and nail with long and slender wire nails.—M. MAHIN.

1 and 2. I have not had sufficient experience to make my opinion of any value. 3. I do not think that the "break-joint feature" is of any particular value. The question, however, it is but fair to say, is mooted, and some think it of great value.—J. E. POND.

1. The wood known in this locality as hickory poplar is the best. It is a variety of the whitewood or tulip tree. 2. By dovetailing. 3. In my wood-zinc queen-excluders, the break-joint feature is a disadvantage, and has been so proved by all who have tested the matter.—G. L. TINKER.

1. I use either poplar or pine. 2. I cut the sheet of perforated-zinc just the size I want the excluder when completed, and frame it, using 8 pieces to each sheet. Two of the pieces are cut just as long as the sheet is wide, and two are cut just as long as the sheet is long less the widths of the two end-pieces, and two are cut just as long as the sheet is wide less the widths of the two side-pieces. This makes the number eight. These strips are kept in stock, and are three-sixteenths by seven-eighths of an inch. They are placed on the edges of the sheet so as to make a square lap at the corners. The whole is nailed with wire nails that will clinch. I use a "form" when putting on the rim, so as to keep the

sheet straight. Made in this way, they are cheaper and better than any wood-and-zinc board.—G. W. DEMAREE.

1. Whitewood, often called poplar or tulip. Not white poplar, but yellow poplar, commonly called whitewood. 2. Just nailed together; that is, if all the slats are just right, the honey-board will be strong and not come apart. Being the inventor, and having used them nearly ten years, I speak from experience. 3. Yes, sir, and it will be retained. Let bee-keepers say what they may, I desire to go on record every chance I get, that both the bee space and the break-joint principles in honey-boards will live with bee-keepers long after you and I are gone.—JAMES HEDDON.

1. Good pine will do very well. 2. Nail them together strongly. 3. That is a disputed point, but I am of the opinion that it is of value, and will be retained.—THE EDITOR.

CORRESPONDENCE.

PRIZE ESSAY.

Extracted Honey—Origin of the Extractor, its Use, etc.

Written for the American Bee Journal
BY C. W. DAYTON.

From the time of Jacob, man has known the value of honey. For thousands of years honey was the only sugar known, and was obtained by putting the combs in a cloth and pressing it out, or melting the combs and thus separating it from the wax. These plans were followed until one Hruschka of Venice, Italy, gave to his son a piece of unsealed comb honey. He put it in his basket and swung it around in a circular manner, when Hruschka noticed that the honey had been drained out, and concluded that the combs could be emptied by centrifugal force. Machines were soon invented for this purpose, and the advantage proved to be greater than had been anticipated. Here was the origin of the honey-extractor.

Liquid honey taken from the combs with the honey-extractor has now been before the world about 25 years, and much has been the discussion regarding its merits and demerits, as compared with other sweets. It is the only product of the apiary that has any likelihood of becoming a staple article. This it may be able to do when it has been produced in sufficient quantity, and thoroughly introduced. It will easily outstrip comb honey, on account of its cheapness and usefulness, as it is a necessary, and, not like comb honey, wholly a luxury—and the cost of production ensures this.

This introduction must be accomplished by constantly appealing to the taste. Let people taste of the honey they are asked to buy, and they will

soon know whether they want it, and what to do with it. If all the extracted honey offered for sale was equal to some I have produced, there would be little hesitation in deciding that most other sweets would be driven out, and comb honey would go begging.

A little depends upon getting the bees in condition to gather the honey; a great deal more upon the time of taking it from the hives; considerable upon its preparation for market; but a decidedly important, and a very much more perplexing question than any of these, is the selling.

The selling depends largely upon the quality, and the quality upon the ripening process. The proper time for extracting, is when the combs are at least all capped over. Honey, when it is "green," has a greenish tinge, a rank taste, and is never as fine flavored as well ripened honey.

Properly ripened basswood or clover honey has a sparkling clearness like flint glass, and the taste is pure and exquisite. I have never seen any honey that I was so well satisfied to sell as that that had been all sealed over before extracting it from the combs, or that was allowed to remain in the hives a few months, and extracted as it was sold. Such honey will run comb honey a hard race at an equal price. It has not much tendency to granulate, and acquires a flavor of the bees and hive that is highly prized by those who use honey as a luxury. This flavor, often, is about all they buy it for, and if it fails in this particular, it is a disappointment. It is the most distinguishable characteristic of bee-honey, and it is seldom very apparent in honey that is gathered by the bees and ripened by artificial means.

There are as many grades of extracted honey as there is butter or cheese, and they are usually designated as basswood, clover, golden-rod or buckwheat. These are simply the sources from which the honey was gathered, and it is quite uncertain in determining the quality.

For example, basswood is always considered a finer grade of honey than buckwheat, but, in consequence of the basswood honey-flow coming on in a "shower," necessitating the hasty extraction of the honey in order to provide room for more, it may be of such consistency that the buckwheat coming on moderately, the honey may be so well ripened while it is being gathered that it is a more delicious article of honey, and worth more per pound for table use than the basswood.

It is reasonable that honey may, by absorption from the air, or the receptacles in which it is stored, lose a delicate flavor, and have a flat, dull taste instead; when, if it had remained in

the hives it would have absorbed elements that banish doubts of genuineness from the minds of the most incredulous. It may require an expert to tell whether a poor article of honey was put up by the bees, but any kind of a judge can readily distinguish it when it has remained in the hives a few months.

There is needed, enough combs to carry the whole crop until the time of sale before extracting it from the combs. This is considerable expense, but it should be remembered that a good article cannot be secured so cheaply as a poorer one. This plan seems to be the only alternative. Extracted honey that has been sealed up in the combs six months, is not more expensive to the apiarist at 8 cents per pound, than comb honey at 14 cents. Neither is honey in the comb more agreeable to the taste than it is out of the comb, except that so much depends upon the time when it is extracted, or, more accurately, the place where it is ripened.

Apiculture has the reputation of being an embarkation that requires not very much capital, and especially so in the production of extracted honey. As the combs are the apiarist's capital, and as liquid honey is more cheaply stored in barrels than in combs, it is an incentive for the use of the extractor too early and too often, getting along with not more than one-fourth the number of combs.

The honey of the old-fogy and "gum" bee-keepers was allowed to remain in the "gum" until late in the fall, and hundreds there are using honey, harvested by modern methods, who say that it does not taste so delicious as it used to.

Extracted honey should be classed as first, second and third quality—not basswood, clover and buckwheat; and the first grade should be marketed in the fanciest shape possible, and deserves the highest price, as a luxury. A good article has qualities that commend it to any use, but, considering the price, it is not as salable for vinegar-making as a poorer grade. Nor will it give better satisfaction. To put anything but the best quality of honey in small, showy packages educates suspicion, and often takes but one dose to a customer.

Those who buy honey in small quantities want the best, with but little regard as to what it costs. Whatever the quality or kind the honey may be, it has a highly respectable use, and should be sold for some special purpose. It has more uses than one, and must be varied in price to enable it to hold its own in competition with other substances. The strongest point in its favor, is the fact that there are

so many grades, and all so nicely adapted to special use.

A custom of selling all extracted honey in small packages is belittling to the business, and casts the idea that a little of it is all that is of any use, and thereby the small package trade is doing a great deal that prevents extracted honey becoming an article for general and wholesale consumption. The best package for it is a farmer's milk-can, holding from 40 to 60 pounds, and with them I have disposed of the largest quantity and made the easiest sales.

It is preferable to shovel granulated honey from the barrels into the receptacles brought by customers, as it is likely to make a broad, every-day impression, and is in accordance with their ideas of handling a staple article. It is the common folks who use the most honey, who eat heartily, purchase in considerable quantities, and want it at all seasons.

It should be supplied at all times of the year, by the bee-keepers in local markets, so that when a market is once created, it will not be allowed a long space of time in which to die out. Those who have put a dependence upon it will change it for something else, if it is not supplied the year round.

When honey is a luxury, it is mostly eaten in the fall—perhaps on Thanksgiving or Christmas, and is soon gone, not to return until another year. To treat a staple article in like manner, is comparable to using up the winter's supply of fuel in one week, and sitting by a frosty stove the rest of the time.

There is great need of bee-keepers adopting some co-operative methods in the matter of production, marketing and general reports that people may have customs that are reasonably staid to accustom themselves to, and to assist the whole people in the efforts to put in practice the oft-repeated argument of patronizing home industries, which is applicable to the honey-industry as a substitute for sugar and syrup.

My favorite method of selling quickly, is to load a wagon with 100-pound, 50-pound and 25-pound kegs, and drive over a certain route once or twice a month. Upon the wagon-box is printed in large, plain letters the word "HONEY." It is best to take more than one grade and kind, and, in selling, full explanations should be furnished for the use to which it may be put.

That granulation is a characteristic of pure honey, is now so well understood, that is an instance of exceptional ignorance on the part of one unacquainted therewith. One or more kegs should be furnished with honey-

gates, and so arranged that a pair of scales bearing the customer's jar may be placed upon it under the gate, and small amounts of honey be weighed out.

Although I have frequently been told that there was adulterated liquid honey in existence, in all my travels I have never succeeded in finding a pound of it, and consequently I may be deficient on that phase of the subject.

Bradford, Iowa.

LATE SWARMS.

How to Make them Profitable to the Apiarist.

Written for the American Rural Home
BY G. M. DOOLITTLE.

It is the custom of many bee-keepers to hive new swarms on a new stand at all times of the year, and while this is profitable in the early part of the season, it is often ruinous so far as a crop of surplus honey is concerned, where practiced the latter part of the honey harvest.

As the season advances, a different plan is needed from that used during June, and after considerable study along this line I hit upon the following plan which has worked to my complete satisfaction. As soon as a swarm is seen issuing, I take six frames of comb and two wide frames of sections, putting the same into a box or hive which is convenient to carry, and when I arrive at the hive from which the swarm is coming out, I take the frames from the box and place them down by the hive. The hive is now opened, and all the frames of brood and honey, with the adhering bees, taken out and placed in the box, after which the two wide frames are placed one at each side of the hive, and the six frames of comb put between them. The hive is now re-arranged and closed.

If the weather is warm, and there are many bees on the frames of brood in the box, about one-third of them are shaken off in front of the hive, when the box is placed in the shade a rod or two away, so that none of the bees from the swarm will find it while they are being hived, which is the next thing to do; hiving them in the re-arranged hive on the old stand. If the weather is cool, or but few bees are on the combs of brood, omit the shaking off, for it will want all of them to keep the brood in good condition.

Now take the box and place the combs in an empty hive, placing the hive where you wish it to stand, and after all is nicely fixed, leave them until the next morning. At any time during the forenoon give them a

virgin queen or a queen-cell just ready to hatch, and you will have no trouble with after-swarms, for the bees feel so poor at this time that they are glad of anything in the shape of a queen.

However, if the delay is longer than 18 hours, they often get so strengthened by the rapidly hatching brood, that they will destroy the queen-cell, or kill the virgin queen, and after-swarming will be the result. Do not give them a laying queen unless you wish a prime swarm from the colony in from two weeks to 18 days, for the bees will surely use her for such swarming if the honey harvest continues for that length of time.

By this plan I got a strong colony on the old stand which will do as much, if not more, in the sections than they would if they had not swarmed, for a new swarm will work with a vigor not known to bees under any other circumstances. In ten days, if the honey harvest continues, sections are given to the colony, which has rapidly increased to such, from the combs of brood carried in the box, and as the young queen has now commenced to lay, the bees will at once go into the sections, often giving a good yield of honey; yet the main yield will come from the new swarm, as they have at least one-third more bees than they would have had they been hived on a new stand, all the field bees returning to this place.

As these bees work with a will in the new swarm, as we have them all here with the swarm, and as the harvest is at its height also, and the brood-chamber contracted, the storing of honey goes on in the sections at a rapid pace, such colonies often giving from 50 to 100 pounds of honey for their keeper, while if hived on the old plan, little save empty sections would be the result.

Now it will be seen that if the hive is left as we now have it until winter, the bees are not liable to have sufficient stores for winter, so when the harvest of white honey begins to draw to a close, the sections are taken from the sides, which were placed there at the time of hiving, and the combs necessary to fill out the hive are used to take their places. In this way the bees will fill these last for winter, and should a fall yield occur, they will often have some extra to spare for any light colonies you may chance to have.

If all the sections which were placed at the sides are not completed, they are to be taken from the wide frames and placed with those which are on top, when the bees will finish them, if the season does not drop off too sudden. At this time of the year no more empty sections should be put on the hive to take the place of the full ones taken

off, but on the contrary, the number of sections should be contracted as much as possible, so as to crowd the whole force of bees on the few that are partly finished, so that, if possible, they may be completed. In this way we lessen the number of unfinished sections to be carried over the winter materially, and get nearly all of our honey in a marketable shape; in places where the fall or darker honey does not find a ready sale, as is the case in this locality.

I find it profitable to take away combs from below which are filled and sealed, placing empty combs in their stead, setting them one side to feed the bees with in the winter or spring, as some colonies will often get short, and I know of no prettier way of feeding bees than to set in combs of sealed honey; for in this way the bees have their feed in just the way nature designed they should have it.

Borodino, N. Y.

QUEEN-EXCLUDERS.

The Use of Perforated-Zinc for Queen-Rearing.

Read at the Ohio State Convention
BY DR. G. L. TINKER.

In discussing this subject, it seems proper to consider the best size of perforations in sheet metal for queen-rearing. Up to the present time, if there have been others who have made extensive experiments to determine the best size to use, they have not made it known.

The size that I have finally decided upon is somewhat more than five-thirty-seconds of an inch; in fact, I do not know the measurement in parts of an inch, but I do know that it is the smallest perforation that will admit the free and unobstructed passage of the worker-bees, and anything less is manifestly impracticable. Five-thirty-seconds of an inch will admit worker-bees, but not freely. I have here a sample of perforated-zinc having this size of perforations. It was sent out some years since by Mr. A. I. Root, and all who used it finally decided that it was an obstruction to the worker-bees, and abandoned its use.

About this time I made my first machine for perforating zinc, and made the perforations a little larger. I soon found, however, that they had to be considerably larger than five-thirty-seconds of an inch, and that the length of the perforations was not a matter to be considered, so that they were as long as a worker-bee. After changing the dies a number of times, I concluded that I had it about right, and put much

of the new zinc to use in queen-traps and honey-boards. But after a little I discovered worker-bees apparently trying to gnaw the perforations a little larger, in the queen-traps, and many were seen to be poking their heads back and forth through the zinc, as if to try it before venturing through, and this even after the zinc had been before the hives for sometime.

I then saw that the bees that were apparently gnawing the zinc, were in reality fast in the zinc by the top of their heads, and the tip of their mandibles. And many of the bees were several minutes in extracting their heads. I then decided to further enlarge the perforations, and that the smallest practical perforation was one that would allow the bees to test it, as they are sure to do, by bobbing their heads through the zinc to find if they can pass without hindrance.

I then made my square-end dies for perforating zinc, now so well known, and found that it obviated all the difficulties before encountered; and yet the perforations were considerably smaller than any other perforated-zinc in use.

I have since made new dies for making round-end perforations. The size of the perforations are about the same as the dies I still use for making the perforations with the square ends.

As before stated, in queen-rearing as in the production of comb or extracted honey, the perforations in the zinc must be of a size to admit the free and unobstructed passage of worker-bees; and it is found, after some three years' use of my perforated-zinc, that no laying queen has ever been known to pass it; and that no ordinarily-developed virgin queen has been able to get through it.

It is true, that by some of the methods of queen-rearing, the queens are but little larger than worker-bees, and such are able to pass the zinc; but such undeveloped queens are unproductive, as compared with fully developed queens, and they are of no practical value. It follows that bee-keepers who use perforated-zinc for queen-rearing or other purposes, should rear only good and well-developed queens, and especially since good queens can now be reared as cheaply as poor ones.

As to the methods of using perforated-zinc in queen-rearing, they are so many and so varied that I shall only be able to allude to a few of them.

The wood-zinc honey-board has of late proved to be quite indispensable to queen-breeders, as it is to many producers of comb honey.

Large numbers of queen-cells can be produced above a queen-excluder, while a good laying queen is in the

brood-chamber. Indeed, it seems at this time, to be the most approved method of rearing queens up to the point of hatching.

Perforated-zinc may also be used to make queen-fertilizing apartments, to be used over any ordinary hive or brood-chamber, it being only required that the queens cannot come in contact with each other to insure the mating of each one of them from separate entrances, as in my new Queen-Rearing-Chamber. But queens cannot be fertilized from the upper stories of hives, while there is a laying queen in the brood-chamber, unless they be so far removed from the laying queen as to make the establishment of an independent colony or nucleus possible; and all who claim the contrary are misleading.

Again, it is impracticable to get queens fertilized, many at a time, from any colony, except in the midst of a honey-flow where the queen apartments are connected by perforated-zinc, so that the worker-bees can go to all the apartments. It follows that some sort of an independent system of nuclei for securing the fertilization of queens is necessary in the absence of a good honey-flow.

New Philadelphia, Ohio.

MINNESOTA.

The Season and Condition of the Bees Described.

Written for the American Bee Journal
BY C. THEILMANN.

Bees in this vicinity have been in a starving condition for the past three weeks on account of wet weather, in which time we had only about three days that it did not rain. Creeks and rivers have been high, and the corn-fields are so thoroughly soaked with water, that they cannot be cultivated—most of them look as green as meadows. On flat lands the corn is suffering, and looks yellow. Small grain is very rank and soft, and if it rains much more, the prospects for a crop will be slim.

My bees wintered fairly well, 2 colonies dying out of 280, when I put them out on April 4; but there were more bees on the cellar floor than usual, on account of its being too warm nearly all winter.

The first pollen came in on April 8, and from that day on there was abundant bloom, one kind following another up to now; but the weather was cold up to April, cloudy mostly through May, and rainy in June so far. There has been only about one week since May 28 that the bees stored a

little more than their living. I do not think that I would have one colony alive now, if I had not fed them in time, although they had from 10 to 20 pounds of honey in their hives when I put them out of the bee-cellar.

Some of the strongest colonies suffered the most, and a number of them had eaten their brood and torn the cappings off the nearly hatching pupae before I noticed their condition. So far I really reared consumers all spring, instead of producers (according to Mr. Doolittle's theory) for the honey crop; but it has not yet come, and at present the outlook is rather slim, for white and other clovers are badly winter-killed, and what there is left (now in bloom) has but little honey, as it is too wet.

Linden has but few buds—only one tree in about twenty has any at all, and the others have them only scattering; so the white honey crop will be small here, at best. We may have a good fall honey crop, if the weather is favorable, as all vegetation (weeds) is very strong and healthy looking.

To have the bees ready for the harvest at the right time has "turned my head" considerable lately, as I cannot find out by practice or otherwise that "right time." I can get my bees in the right condition at a certain time, if I only know the time in advance. It is clover time now, and I have strong colonies of bees to harvest a big crop, but the outside conditions are out of their usual order, which man is unable to control. I have always looked at that "right time" theory as a rather "thin concern," the proof of which I am experimenting at the present.

LATER.—Since writing the above, we had very heavy rains nearly all day and part of the night of June 23, and to-day the Zumbro river is overflowing its whole bottoms, doing immense damage on the meadows and cornfields. This is the highest flood on this river, in summer time, since 1859, and is doing the most damage, as the hay crop was nearly full growing, and the cornfields will be badly washed.

The past two days were very hot—100° above zero in the shade. Bees are not doing anything, as there is no nectar in white or Alsike clover. Mine are in a starving condition, with a field of Alsike clover (which was not much winter killed, as it is sheltered) 40 rods from the apiary, and in full bloom. Alsike never failed to yield honey heretofore.

Theilmanton, Minn., June 26, 1890.

The Northern Illinois Bee-Keepers' Association, will hold its fall meeting at Harlem, Ill., on Aug. 19, 1890.

D. A. FULLER, Sec.

THE BEE-YARD.

Much Bloom, but no Honey—Self-Hivers, etc.

Written for the American Bee Journal
BY F. D. LACY.

The hives are roaring full of bees, with heavy brood coming, but empty of honey. The apple-trees bloomed in their fullness, but no bees worked upon their blossoms. The wild cherry and many other wild blossoms were also slighted. White clover covers the plains, and makes the fields white with its bloom, but no bees are found at work upon it. The flowers of my wife's beautiful garden seem to have no attraction for the bees—they hurl past to distant wilds for forage, and it is a mystery what they get.

I sit by the hives, and behold that they all work from the same thing. A light and bright yellow pollen goes in on 46 bees per minute, and at a low estimate it would aggregate to at least six quarts every ten hours, besides what honey is carried in, all of which is consumed, or has been thus far.

We have had much rainy and windy weather, however, which has been a great set-back. I have a swamp, with various kinds of timber growing, a short distance to the northwest of my bee-yard—the bees all go in that direction, and I followed to find what they were working upon. Thousands were to be seen upon the ground where the water during the winter stood and has soaked away. I took some of the earth, and thought I would analyze it, but concluded that if it possessed any saccharine quality, it would only develop out to me carbon, oxygen and nitrogen—all of which I knew the mud possessed; suffice to say, the bee has a finer apparatus for analyzing than that of mine.

No swarms have issued up to this date.

ANTS AND BUMBLE-BEES.

I placed salt in front of the hives to keep the grass down, which I find to be a good way. A part of my yard is dry and sandy, and the ants invade the ground by millions. I sprinkled the ground profusely with kerosene, and exterminated them. You want to look out for the large black ant. It is a terror among bees, and very destructive, doing its work at night, destroying both bees and comb.

Bumble bees are very numerous for so early in the season. They visit the hives, and walk in without invitation. I kill them when I can.

EXPERIMENTING WITH SWARM-HIVERS.

I have made attachment of my automatic swarmer, to about 30 of the

hives of my heaviest colonies. I shall use no queen-excluders, for the way I have it I am confident that it will require none. I concluded that I would not shout until I was out of the wilderness, but I hope soon to report success.

My fish-pond adjoins the bee-park, where sport thousands of bright speckled trout, and where a fine little skiff is found, in which my six beautiful children pass many happy hours; also, where my bees "wet their whistles."

On the night of May 29, three thieving boys invaded my bee-park, for which I have them upon "the string." I have invented a lock for each hive, which is simple and handy, of nominal cost, and no incumbrance.

I have also an electric wire which surrounds my bee-yard, so that no one can approach the hives without ringing the bell at my room window.

Lake Co., Mich., June 14, 1890.

CANADA.

Report of the Haldimand, Ont., Convention.

The May meeting of the Haldimand Bee-Keepers' Association was held at Cayuga, Ont., on May 17, 1890, with President Frank Rose in the chair.

THE REARING OF QUEENS.

Mr. Armstrong said he did not rear queens until swarming-time, and only from his best colonies—good honey-gatherers, of nice color, and gentle. He gave a very interesting account of his methods, and had very good results, losing very few young queens in mating.

The President and Mr. Kindree explained their plans of rearing queens.

INTRODUCING QUEENS.

Mr. Atkinson uses a Peet cage, which he puts into the hive requiring a queen, and leaves it there until the bees gnaw her out. He then removes the cage when everything is quiet.

Mr. Schisler gave an amusing account of his first attempt at introducing a queen.

Mr. Armstrong said that he thought a great many queens were lost through the bee-keeper being too anxious to see whether the queen is all right, and examining the hive too soon after the queen has been introduced. He now leaves the colony alone for several days, and never loses a queen. He uses a Peet cage, but instead of putting it between the frames, he puts it on top of the frames, and lets the bees get her out.

Mr. Overholt lets the queen run in on top of the frames in the evening, about dark, and he has been very successful.

The President thought that the most important thing about introducing queens was not to disturb the colony; do it in the evening, and as quietly as possible.

Twelve members of the association reported 411 colonies, fall count, and 396 in the spring of 1890.

It was decided to have the Secretary correspond with Mr. G. B. Jones, regarding his terms for a lecture on bee-keeping at the next meeting on the last Friday in August; also that the next meeting be held at South Cayuga, Ont.

FRANK ROSE, Pres.

BEE-PROVERBS.

Some Warning Suggestions from a Proverbial Experience.

Written for the American Bee Journal
BY M. A. KELLEY.

My son, let not thine enemy entice thee to tolerate frames and fixtures of diverse sizes in thine apiary. At first they may be pleasant to the eyes, being new, but they wax old, and are covered with brace-combs and vexation. They are weariness to the flesh, and engender profanity. They stir up trouble in the early morn, and do not desist therefrom until the going down of the sun. They will follow thee into the land of sleep, and vex thee in thy dreams. They beget war between the bee and her keeper, in which the weapons are hands and stings. He wildly claweth the air, and the bee getteth in her work near his off optic. He retireth in haste to his tent, and applieth divers useless remedies, and his neighbor peepeth over the fence and laugheth him to scorn. Life having lost its point for the bee, she pineth away and is no more.

Moreover, when thou sendest thine order for odd-sized fixtures to the supply dealer, he will smile at thy veridancy, and in his heart he will call thee a fool. And when thou comest to sell thy bees, the buyer will write back, being wroth, that he wist not that he was dealing with a crank. So the odd-sized frames sticketh closer than a brother-in-law, for the other fellow, being in his right mind, will not part with his shekels in exchange. And thus shall odd-sized fixtures become a drug upon the market, and an eye-sore to the children of men.

My son, be thou warned in time and go not after the patent clap-trap man, who lieth in wait for thy lucre. Sweetly as a syren he singeth, but the end is trouble and sorrow. Cleave unto standard sizes, and good tools, and get unto thyself comfort and pleasure. Be not over-anxious to be ahead of

the times, like some we wot of, for in the day that they are overtaken, thou canst laugh at their calamity. Let others fuss with fixtures of doubtful utility, and if they prove to be valuable, thou canst then invest in them safely.

These are words of truthfulness and soberness, being based on the writer's experience. Heed them, and take comfort all the days of thy bee-keeping, for if thou do not, there is trouble.

Milton, W. Va.

ROBBING.

Some Experiences with the Bees Robbing.

Written for the Prairie Farmer
BY MRS. L. HARRISON.

Not long since there was prospect of the whole apiary being demoralized. Bees appeared to know a hive that contained honey, and thousands of bees were determined to get it. It was risky business to feed, for it was soon telegraphed all around, and thousands were determined to have a share. When weak colonies were fed, it appeared to excite them, and if robbers came, made no attempt to defend their store, but invited them in, and finally went home with them. The only safe time to feed was a little before or just after sundown.

Syrup, made of any kind of good cane sugar, is a safe food for bees now, when they can fly, and excites robbing much less than honey. It should be made thin, and can be fed in any sort of a vessel with care. It is not natural for a bee to sip like a fly, and if they slip into a tin or earthen-ware vessel containing syrup, they cannot get out; if it is a wooden one, they can. They can grip wood with their feet, but cannot a smooth, glazed surface. Tin pans are good feeders, provided that cheese-cloth or some thin material is tied over loosely, so that it will settle down upon the surface of syrup, as it is taken out by the bees. Care should be taken that no bees can get under it, for if they do, they will drown. Simply spreading on the cover will not do. It must be tied around under the projecting rim.

Blocks of wood, which have kerfs cut in them by a wobbling saw, make good feeders. I was given such an one by a manufacturer, and on showing it to a bee-keeping visitor, he said: "Mrs. Harrison, you fill that thing with syrup and give it to the bees, and it will soon be a drowning, writhing mass of bees." It was in the fall of the year, when I had a colony that had not sufficient stores for the coming winter,

so I filled it and gave it to the bees. In an hour or so I said: "Let us go and look at the feeder." We found the feeder empty—clean and dry, and not a dead bee. He looked astonished and said: "Is not that curious?" There is nothing curious about it to one who understands the nature of a bee's foot.

Peoria, Ills.

BUCKWHEAT.

How It Should be Grown and Harvested.

Written for the Country Gentleman
BY H. STEWART.

Buckwheat is not only one of the most useful and productive of crops, considering its short season, but it is only so when it is grown under the best conditions. Its average yield is perhaps under 20 bushels per acre, but I have grown 75 bushels once, and 40 to 50 bushels often.

The grain is one of the best for feeding all animals, but pigs especially; the bran or refuse after grinding is better food than any other, and while the straw is not adapted for feeding, it is, when used as other straw, as free from objection in any way as other straws are.

This crop may be grown in the shortest season. It may be sown from June to July. The twelfth of the latter month is the favored time where the grain is grown for making flour for sale, and where its quality is held to be superior to that produced in any other locality. The best soil is a stony gravel; it thrives best all along the range of the Appalachian mountain from North Carolina to Northern New York through West Virginia and Pennsylvania. A considerable quantity of limestone in the soil seems favorably to affect the quality of the grain for flour, but I have grown it on the fresh forest lands of Michigan, the slate hills of Pennsylvania, the loose sands of New Jersey, and here on the most ancient granite hills of Western North Carolina—everywhere without any apparent failure in its good quality. But in all cases I have given it as good care as the corn or oat crop, and have never been disappointed by an ungenerous return.

I have cut the clover late in June, turned the sod under after a few showers have started a new growth, and sowed buckwheat in July, seeding with clover and timothy, have taken a crop yielding \$40 or \$50 per acre, and the next year have cut hay.

The preparation of the land and the sowing of the seed are too commonly thought to be immaterial, but this is a

great mistake. The principle of "what is worth doing is always worth doing well," applies to this as to every other farm work; and good plowing and harrowing and covering in the seed are essential to a good yield. As the early fall frosts are most to be avoided, a quick start and rapid growth are necessary to this end, and will mature the crop before any danger need be apprehended. As the grain contains considerable lime, phosphoric acid and sulphur, 9½, 6 and 2½ pounds in 1,000 pounds of fresh substance, superphosphate of lime, which contains all these, is the best fertilizer, and has a far better result than yard manure, which tends to luxuriant growth and stalk and foliage rather than to grain, and delays the ripening of the seed.

Thin sowing—not more than a peck of seed to the acre—tends to the growth of side branches which bear a profusion of bloom, and largely increases the yield. Thick sowing, on the other hand, forces a tall single stem with less bloom and seed. A well-grown crop affords a beautiful sight when the field is covered with a level table of bloom, and the pleasant hum of bees which gather from all quarters, with the pleasant perfume, are additional pleasures which accompany it. It is a popular belief that the bees detract from the yield of the crop. I have never found it so, but have been confirmed in the belief that the bees are really beneficial in securing the most complete fertilization of the blossoms with a corresponding increase of grain, and while neighbors have gathered from my work a plentiful yield of honey, this has never been begrudged them from "dog-in-the-manger" objections.

The harvesting of the crop requires special care. Buckwheat cannot be stored in a barn. The succulent nature of the plant prohibits this, for it tends to rapid fermentation and heating, and seriously injures the quality of the grain by decomposing the starch in it. The flour is heavy, and does not rise when made from grain which has been suffered to heat either while in the straw or the granary. The crop is cut at the time when the grain is mostly ripe. Some of it will yet be green, and some bloom on the stalks will remain as long as the plant stands. Hence when frost may be expected, the crop should be cut. Much of the green seeds will ripen in the swath and the gavel. A gavel is a small sheaf not tied up, and this is necessary to the curing of the straw. A cradle, or a reaper which drops in an even swath, is used for the cutting. The grain lies several days in this way if the weather is fine, and is then raked up in small bundles, which are set up

in a loose conical form, to admit air through them.

When the grain is dry, it is threshed at once; if by machine, the spiked concave is removed, and a smooth one is used in place of it, to prevent breaking the grain. For the same reason, the feeder should crowd the grain to the full capacity of the machine. The pedicels of the grain are very thin and weak, and are easily broken in threshing, and especially in hauling to the thrasher. Hence blankets or sheets should be spread on the rack to catch the loosened grains.

When threshed, the grain must be cleaned at once, and placed on an airy floor to dry, in a thin layer. Shoveling over to prevent heating is necessary. The grain should be quite dry before it is put in bins, and large bins are not desirable. The grinding is best done on a dry, windy day, when the very absorbent grain will not gather moisture; and when the grain is to be sold, it should be floured as early in the season as possible. I have sold the flour for \$6 per 100 pounds when it was first in the market, and ten days afterward the price had fallen to \$3. Taking time by the forelock is thus desirable in disposing of the produce.

There are four kinds of this grain in use—the Merino buckwheat or Indian wheat, of Northern New England, which is a prolific, early maturing, but poor flouring kind; the black and grey, or silver-hull, and the now popular and valuable Japanese variety, which has a large grain, and makes excellent flour, and is the most productive of all. The silver-grey, I think, makes the lightest flour, and the best for cakes, and it is a good yielder.

Doolittle on Queen-Rearing.

Queens can be reared in the upper stories of hives used for extracted honey, where a queen-excluding honey-board is used, which are as good, if not superior, to Queens reared by any other process; and that, too, while the old Queen is doing duty below, just the same as though Queens were not being reared above. This is a fact, though it is not generally known.

If you desire to know how this can be done—how to have Queens fertilized in upper stories, while the old Queen is laying below—how you may safely introduce any Queen, at any time of the year when bees may fly—all about the different races of bees—all about shipping Queens, queen-cages, candy for queen-cages, etc.—all about forming nuclei, multiplying or uniting bees, or weak colonies, etc.; or, in fact everything about the queen-business which you may want to know, send for "Doolittle's Scientific Queen-Rearing;" a book of 170 pages, which is nicely bound in cloth, and as interesting as a story. Price, \$1.00.

CONVENTION DIRECTORY.

1890. Time and place of meeting.

- July 17.—Carolina, at Charlotte, N. C.
N. P. Lyles, Sec., Derita N. C.
- Aug. 19.—Northern Illinois, at Harlem, Ill.
D. A. Fuller, Sec., Cherry Valley, Ills.
- Aug. 29.—Haldimand, at South Cayuga, Ont.
E. C. Campbell, Sec., Cayuga, Ont.
- Sept 10.—Ionia County, at Ionia, Mich.
H. Smith, Sec., Ionia, Mich.
- Oct. 29-31.—International American, at Keokuk, Ia.
C. P. Dadant, Sec., Hamilton, Ills.
- Oct.—Missouri State, at Mexico, Mo.
J. W. Rouse, Sec., Santa Fe, Mo.

In order to have this table complete, Secretaries are requested to forward full particulars of the time and the place of each future meeting.—THE EDITOR.

International Bee-Association.

PRESIDENT—Hon. R. L. Taylor, Lapeer, Mich.
SECRETARY—C. P. Dadant, Hamilton, Ills.

National Bee-Keepers' Union.

PRESIDENT—James Heddon, Dowagiac, Mich.
SEC'Y. AND MANAGER—T. G. Newman, Chicago.

SELECTIONS FROM
OUR LETTER BOX

Fragrant with New Honey Odor.

After having the poorest season I have seen, my bees came through the last winter without the loss of a single colony. I had to feed some during May, on account of so much wet, and very little fruit-bloom. White clover, which is very abundant this year, is now in full bloom. Most of the honey is being stored in the brood-nest. The air in the bee-yard is fragrant with the odor of new honey. This, to me, is quite refreshing.

J. W. CARTER.
Pleasant Dale, W. Va., June 23, 1890.

Bees Dying in the Hive.

I have started in the bee-business with 15 colonies this spring, in box-hives, which I transferred to frame hives, and all have been doing well until to-day. I put on supers sometime ago, and looked at them to-day, and all are doing well but one colony, which had commenced work in the super, but it was almost half full of dead bees. I removed the super and found the hive in the same condition, two-thirds of the bees were dead, and all the brood. The bees looked as if they had been drowned, being of a very dark color. I killed the rest of the colony for fear they would disease the rest of the bees. Will some one tell me what was the cause, or the disease they had, and the remedy? THOMAS POWELL.

Macy, Ind., June 23, 1890.

Too Much Rain for the Bees.

This has been the worst spring for bees in this part of the country that I ever saw. There was no honey in the blossoms, and there seemed to be none in white clover when it first bloomed, as bees did not store any honey for two weeks after it first came out, and were in a starving condition about June 1, but since that time they have been doing well, and swarming; but the flow does not seem to last. I think that big rains have hurt it some. We are having rain every day or two.

Thos. HOEY.
Salineville, O., June 23, 1890.

Swarm Returning to Old Hive.

I bought 7 colonies of bees last winter, and put them into the cellar, and when I took them out on April 10, they were all strong except one, that was queenless, and the others robbed it. I had my first swarm on May 28. I have one pure Italian colony that swarmed on June 7, and then again on June 8. Who can beat that? They were the largest swarms I ever saw.

What is the cause of a swarm going back to the parent hive when it has a queen? I had one issue on June 10, I caught the queen, and put her into the new hive, and they all came out and went into the parent hive again.

Mrs. S. F. BURRIS.
Wichita, Iowa, June 11, 1890.

[Something about the new hive was distasteful to them, and so they concluded to go back to the hive they came from. It is a good plan to give them a frame of unsealed brood, to induce them to stay in the new hive, if they seem dissatisfied.—ED.]

Favorable Weather for Bees.

I cannot afford to do without the AMERICAN BEE JOURNAL, and no other bee-keeper can, who wishes to keep posted and be up with the age. Bees are slow about swarming. I have had only one swarm from 30 colonies—nearly all are strong, and are storing honey in the sections. We are having very favorable bee and honey weather (except wind, which has blown more than usual this season).

A. M. VANNOY.
Hedrick, Iowa, June 23, 1890.

Bees are Working Hard.

Bees are just booming around here—some are filling their second case of sections like the first, with white clover honey. They do not take time to swarm, but keep working away—that is, mine do not, while other bees are swarming much, and lots of them are escaping to the woods.

ED. E. SMITH.
Carpenter, Ills., June 24, 1890.

Basswood Blossoms.

Bees are doing very well; the basswoods are loaded with blossoms, and may do great things in the honey-flow. I am ready for it.

R. F. HOLTERMANN.
Romney, Ont., June 25, 1890.

Cause of Loss in Winter.

I have hitherto hesitated in sending my report, on account of my great misfortune in losing about all my bees last winter—133 colonies out of 142—thinking at the time that it was a misfortune due to my personal neglect, because the forepart of the winter proved so mild that I did not store my bees in their winter repository until quite late. I did intend to take care of them in December, but waited for a more favorable opportunity, and dry mild weather, for we had, in January, rain and sleet, with some freezing; at one time 1½ inches of ice covered over the hives and ground.

I was careful after finding the bottom-boards frozen solid on the ground, to pry only the hives loose from the bottom-boards, and place them on another bottom for transportation to the bee-house. This jarring and coat of ice melting in the bee-house after carrying them in, I concluded, gave my bees the death-blow; 18 colonies I left out altogether, and of these only one lived through. I afterward heard reports

all around through this section of country—¾ of all the bees winter-killed, some experienced bee-men losing all they had, and in some localities they wintered well. It is generally understood and believed that the cause of so great loss in bees dying last winter, was due to late honey-dew, which proved a poison to the bees, for the symptoms were everywhere alike—diarrhea.

In early spring, after putting them out, they would swarm out, with the hive full of honey, and unite in large masses and go off, and those remaining would make no headway in breeding. The blacks suffered the most from the disease, and, strange to say, the bees would kill off their queens and start queen-cells as if they blamed the queens for their misfortune. I watched many colonies do the same, and the weather being so cold in May, the queen-cells would not hatch, and in spite of my efforts to heat bricks and place them over the brood-nest, they would dwindle away. In this section of country, about ten miles square, last fall we could easily count 600 colonies of bees, and this spring, after spring dwindling was over, we could not count 100 colonies.

I presume that many bee-keepers have learned a lesson in neglecting to prepare their bees early for winter, with plenty of wholesome stores and warm packing. My loss in bees, and broken bones, will put a check to my bee-keeping in the future.

STEPHEN ROESE.
Maiden Rock, Wis., June 24, 1890.

Bees Booming on the Clovers.

Bees are now booming on Alsike and white clover; two-thirds of the bees around here perished for want of food during the last half of May. We saved all of ours, and now they are paying for the trouble and expense.

H. H. FLICK.
Lavansville, Pa., June 21, 1890.

Getting Considerable Honey.

We have had fine rains, and bees are getting considerable honey, and making preparations to swarm. We may have a good season yet.

W. J. CULLINAN.
Quincy, Ills., June 18, 1890.

Gardening for Women.

Bee-culture, poultry-raising, silk-worm, culture, etc., are often brought to our notice as possible and profitable employments for those residing in the country, who are desirous of adding to their finances. Market gardening and floriculture have been taken up by some enterprising ladies on a large scale, and made to yield good incomes, providing work for many people, but to the farmer's wife, the residents of small villages, and young girls everywhere (save in the thickly settled parts of the cities), nothing offers more certain returns for the amount of labor and money invested, than in raising small fruits and early vegetables.

Fresh, green lettuce, bright, crisp radishes, cucumbers for the table and pickling, squashes, tomatoes, and melons, require but little care after once the ground is prepared. Asparagus seed costs but 10 cents a package, and the two-year-old roots from 75 cents to \$1.50 per 100. It takes patience, of course, to wait for the three years' growth necessary after planting the seeds before the shoots can be cut. Then you may cut from the bed for years. A medium-sized bed has been known to yield \$50 worth of shoots in a single season at very moderate prices.

Strawberry culture always brings good returns, and though the labor of setting

weeding, cutting runners, etc., is hard, it is not more laborious than many another thing, generally known as "woman's work."

Raspberries, blackberries and grapes require more outlay of money in the beginning, but do not take a large space, and require but little care. Some with whom I have talked regarding this matter, claim that they hesitate to try it, lest they may not find a market for their productions. Of this be assured—a good article never lacks a market, while indifferent ones are always a drug. If you cannot do any better with it at first, let some of it pay for the washing, sewing, dress-making kindergarten teaching—anything that you may dislike to do, but wish to obtain for yourself and family.

Your goods thus introduced, if really worthy, will soon have a good cash value. Try it, some of you sisters, and when you have made it a success, give the benefit of your experience to some of the doubting ones.

INEZ REDDING.

The Hot Wave.

Clover has been in bloom for some time, but the bees are getting but very little more honey than they use. The weather is warm—yes, hot, with warm nights and heavy dew, and occasional showers. I have had but 3 swarms, 2 of them yesterday.

The mercury was 93 degrees "in the shade" yesterday, and I sweat so as to wet three shirts so as to have to change; not by working among the bees—oh, no! It came by worrying over the answers given to people in reply to Census questions asked by your humble servant. As nearly all in this locality know me, I am not surprised, but rather worried at some of the answers. Here is a sample: I asked a lady her age, and her reply was, "What do you ask for a set of teeth?" And when I asked her if she could read and write, she wanted to know if I had any honey to sell! and another lady ordered me out of the house because I wanted to know whether she was a male or a female! And so it goes; and I believe that I am getting poorer in flesh and purse every day, and I would not be surprised if I do not weigh over 225 pounds. I presume I have your most cordial sympathy.

A. B. MASON.

Auburndale, O., June 24, 1890.

Season in South California.

We have had four days of hot east wind from the Desert, which has cut off the season abruptly, which, combined with the cold, backward spring, and not any late rains, makes another poor season for this section, and the greater part of this and adjoining counties. These southern counties of California take the lead in the amount and quality of honey.

M. H. MENDLESON.

Ventura, Calif., June 10, 1890.

Wintered Perfectly.

My 105 colonies of bees have wintered perfectly, as usual. I cannot see any advantage in the cellaring of bees, when they can be wintered without loss on the summer stands packed in chaff. This time, however, I used buckwheat hulls, which is perhaps warmer than chaff. I placed each colony on the scales before packing for winter, and made sure that each had at least 30 pounds of good honey for stores.

On June 1, I found 75 colonies on the verge of starvation—owing to immense quantities of brood having been reared, and the season turning wet and cold during fruit-bloom. I immediately fed 200 pounds

of sugar syrup,* by filling the frames with the same and placing them in the brood-nest. This is the second time during my bee-keeping experience that I have been compelled to feed in June.

Bees are now doing well, nearly all of mine being in the supers, and honey is coming in fast when the sun shines, which is no more than half of the time. The season is very late—no swarming yet—and I do not expect a very good yield this season.

The AMERICAN BEE JOURNAL is finding its way into a great many bee-keepers' hands in this vicinity, and is highly praised wherever it goes.

H. J. ROGERS.

Stannard's Corners, N. Y., June 23, 1890.

An Average Crop Expected.

I commenced the season of 1889 with 7 colonies in good condition, increased them to 28, and took 1,240 pounds of honey, mostly in 1-pound sections. I had some experience in transferring, uniting and dividing, and thanks to the AMERICAN BEE JOURNAL and other helps, I was successful in each. I lost one colony in wintering, or in March it starved—it could not live on pollen. The 27 I took out of the cellar on April 5, and they are booming, one colony working in the third story, and some others about ready for the third. Swarming is the order of the day, and I have my hands full. I never saw white clover so abundant, and linden promises wonders. The weather has been against us all through May and part of June, but with good weather we will have an average honey crop.

JOS. L. FLINT.

Marion, Iowa, June 25, 1890.

Doing Finely—Prospects Good.

Bees are doing finely, and the prospects for a good honey crop is splendid at present. Most of my colonies have cast one large swarm each; swarms that issue after this date, will be returned, to keep the hive well populated. Sections have been given to the stronger colonies. A few of the hives have cases that are nearly filled with honey, which is unusual for this locality—our main crop is gathered in the fall.

G. M. WHITFORD.

Arlington, Nebr., June 28, 1890.

Storing Honey—Wet Weather.

My bees are in good condition. The section-cases have been on for ten days, and they have stored 14 pounds per colony in that time. In ten more days the sections will do to come off. I had 8 new swarms, and they are working in the sections. The white clover is blooming here, but the wet weather is putting the bees behind.

JACOB SHAFFER.

South Park, Ky., June 21, 1890.

Gathering Honey—Swarming.

I had 90 to 100 hives full of bees between June 4 and 12, and fed them 300 pounds of honey. I have not had a new swarm as yet this season. Since June 22 they have seemed to gather quite a little honey. I put on 68 cases yesterday for the first, and honey is coming to day free enough, so that they would not pay any attention to honey put out in the yard. I examined the hives on June 23 and 24, to clip the queens, wings, but I did not find any queen-cells started, so I do not look for swarms for several days.

O. R. GOODNO.

Carson City, Mich., June 27, 1890.

* The next meeting of the Carolina Bee-keepers' Association will be held in Charlotte, N. C., on Thursday, July 17, 1890.

N. P. LYLES, Sec.



ALFRED H. NEWMAN,
BUSINESS MANAGER.

Business Notices.

Subscribers who do not receive their papers promptly, should notify us at once.

Money in Potatoes, by Mr. Joseph Greiner. Price, 25 cents, postpaid. For sale at this office.

Red Labels are nice for Pails which hold from 1 to 10 lbs. of honey. Price \$1.00 per hundred, with name and address printed. Sample free.

Calvert's No. 1 Phenol, mentioned in Cheshire's Pamphlet on pages 16 and 17, as a cure for foul brood, can be procured at this office at 25 cents per ounce, by express.

Send us two new subscriptions, with \$2.00, and we will present you with a "Globe" Bee-Veil for your trouble. (See the fuller notice in the advertising columns.)

The date on the wrapper-label of this paper indicates the end of the month to which you have paid. If that is past, please send us a dollar to advance that date another year.

Please send us the names of your neighbors who keep bees, and we will send them sample copies of the BEE JOURNAL. Then please call upon them and get them to subscribe with you.

Any of the Political Dollar Weekly Newspapers will be clubbed with our JOURNAL at \$1.85 for the two; or with both our HOME JOURNAL and BEE JOURNAL for \$2.50 for all three papers.

As there is another firm of "Newman & Son" in this city, our letters sometimes get mixed. Please write *American Bee Journal* on the corner of your envelopes to save confusion and delay.

Systematic work in the Apiary will pay. Use the Apiary Register. Its cost is trifling. Prices:

| | |
|-----------------------------------|--------|
| For 50 colonies (120 pages) | \$1 00 |
| " 100 colonies (220 pages) | 1 25 |
| " 200 colonies (420 pages) | 1 50 |

When talking about Bees to your friend or neighbor, you will oblige us by commending the BEE JOURNAL to him, and taking his subscription to send with your renewal. For this work we will present you with a copy of the Convention Hand Book, by mail, postpaid. It sells at 50 cents.

A "Binder" made especially for the AMERICAN BEE JOURNAL, and lettered in gold, makes a very convenient way of preserving the copies of the BEE JOURNAL as fast as they are received. We offer it, postpaid, for 60 cents; or as a premium for two new subscriptions, with \$2.00. It cannot be mailed to Canada.

Mid-Summer—1890.



THOMAS G. NEWMAN & SON,
246 East Madison St., Chicago, Ill.

Our Annual Catalogue and Price-List is herein presented to our patrons, and we would especially invite a careful perusal of it before ordering supplies for the apary. As this Catalogue contains illustrations and descriptions of many of the articles enumerated, as well as prices, purchasers can easily select such as they desire, and compute the entire cost of the goods ordered. Please remember the goods offered at low prices are often dear, because they are generally proportionately inferior.—“Excellence is Cheapness.”

Your full address, plainly written, is very essential in order to avoid mistakes and delays.

How Goods are to be sent, should be distinctly stated. Any thing to be shipped by freight should be ordered from 10 to 30 days before needed for use, according to the distance from Chicago. Express charges are high on long distances, and heavy goods should not be sent by Express, unless particularly needed for use at once.

We Pay Postage on all articles quoted by mail. All others are to be sent by express or freight, at the purchasers' expense.

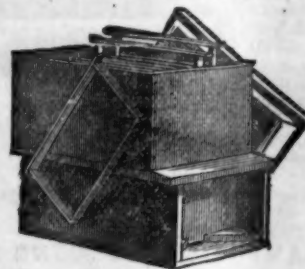
Goods will be sent C.O.D. only when sufficient money is received with the order to pay charges both ways, in case they are not taken from the express office by the person ordering them.

Remit by Express Money Order, Registered Letter, or Bank Draft on Chicago or New York, payable to Thos. G. Newman & Son. Checks on local Banks cost us 25 cents for collection, and if you send such, add that amount, or we shall deduct it from your order.

If Goods are damaged or not such as were ordered, do not return them, but write to us, and we will direct how to dispose of them.

Credit.—We sell on small margins, and cannot afford to take the risk of selling on Credit. If we did a credit business, we should be obliged to add from 10 to 20 per cent. to our present prices, to make up for those who never pay, and for clerk-hire to keep books, etc.—this we know our cash customers would not think to their advantage. In order not to do injustice to any one, we make this an invariable rule—therefore do not ask us for credit. This system gives all the advantage to “cash customers,” but the “credit system” works to their injury. We therefore always require Cash with the Order.

STANDARD LANGSTROTH BEE HIVE.

(14x18 $\frac{1}{2}$ inches inside.)

SAMPLE HIVES—Nailed, not painted.

- No. 1.—Brood chamber with portico, 10 frames, 7 $\frac{1}{2}$ inch cap, but no surplus arrangement.....\$1 25
- No. 2.—Same as No. 1, with the Comb Honey Rack complete.. 2 00
- No. 3.—Same as No. 2, with an additional story containing 10 extra frames for extracting, interchangeable with those in the brood chamber—a complete 3 story hive..... 2 50
- No. 4.—Brood chamber with portico, 10 frames, and a 7 inch story, with 7 cases containing 21 Prize Boxes, and tin separators, for surplus honey, with a 2 inch cap..... 2 25
- No. 5.—Same as No. 4, with an additional story containing 10 extra frames for extracting, a complete 3 story hive..... 2 50
- No. 6.—A complete 2 story hive containing 20 interchangeable frames, with a close-fitting—2 inch—cap 1 75
- No. 7.—Same as No. 6, with the second story containing seven cases holding eight one-pound sections each (56 in all), and two tin separators attached to each case, complete.. 2 85
- No. 8.—A 3 story hive containing 20 interchangeable frames and seven cases, as described in No. 7..... 3 25
- No. 9.—Brood-chamber with portico, 10 frames, and Heddon's surplus arrangement, containing 32 one-pound sections.. 2 00

All Langstroth hives have metal rabbets for the frames to rest on.

Material for Langstroth Hives, in the Flat, Ready to Nail.

| Numbers | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
|--------------|-----|--------|--------|--------|--------|--------|--------|--------|--------|
| 5 or more, | 80c | \$1.10 | \$1.40 | \$1.40 | \$1.70 | \$1.10 | \$1.50 | \$1.80 | \$1.10 |
| 10 or more, | 78c | 1.08 | 1.38 | 1.38 | 1.68 | 1.08 | 1.48 | 1.78 | 1.08 |
| 25 or more, | 75c | 1.05 | 1.35 | 1.35 | 1.65 | 1.05 | 1.45 | 1.75 | 1.05 |
| 50 or more, | 73c | 1.03 | 1.33 | 1.33 | 1.63 | 1.03 | 1.43 | 1.73 | 1.03 |
| 100 or more, | 70c | 1.00 | 1.30 | 1.30 | 1.60 | 1.00 | 1.40 | 1.70 | 1.00 |

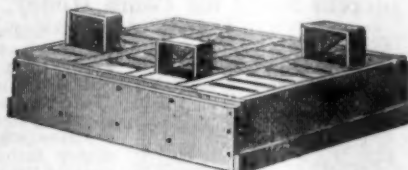
The top and bottom-boards, on all the Hives, are in one piece.

We make Hives Nos. 4 and 5 to contain 28 one-pound Sections, at the same prices, when so ordered.

THE HEDDON SURPLUS-CASE,

As Used on Our Langstroth Hive, No. 9.

is designed for obtaining honey in the comb, without the use of separators. The sections for this arrangement are 1 $\frac{1}{2}$ inches wide, and will hold just the same quantity of honey as the 2-inch sections when separators are used. In the absence of separators, of course the sections should be filled with comb foundation, in order to secure straight combs, and such as may be packed in the crates for marketing without interfering with one another.



As these “stories” are arranged with a $\frac{3}{4}$ -inch space over the sections, they may be “tiered up” when desired.

For those who wish to “tier up,” or to get extra “stories” of the above, we will furnish the material, ready to nail, of either kind, with the full number of sections, at 45 cents each; or the same nailed, all ready to go on the hive, at 65 cents each.

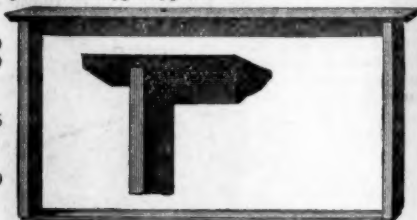
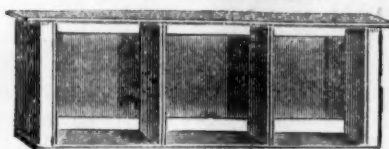
Also with T-Tins, at the same prices, when so ordered.

SUPPLIES FOR BEE-KEEPERS—For Sale by Thomas G. Newman & Son, Chicago, Ills.

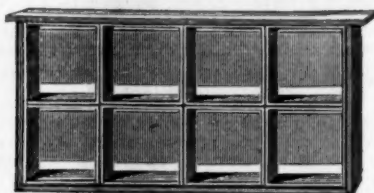
MATERIAL FOR LANGSTROTH FRAMES.

Ready to nail—9½"x17½" outside.

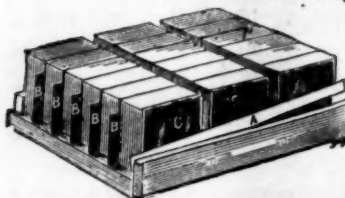
100 frames...\$ 1 10
 1,000 frames.... 10 00
 Bored for wiring,
 having flat top-
 bars, per 100...\$ 1 65
 Bored for wiring,
 having flat top-
 bars, per 1,000.\$16 00

**WIDE FRAMES FOR TWO-POUND SECTIONS.**

Material for wide
 frame, to hold 3 2-lb.
 sections, on Lang-
 stroth hive, per 100, \$2 00
 Tin Separators to fit
 these wide frames,
 per 100 .. 2 50

WIDE FRAMES FOR ONE-POUND SECTIONS.

Material for wide frames, to hold 8 one-pound sections, on
 Langstroth hive, (same size as the brood frames,) per 100..\$1 50
 Tin Separators to fit these wide frames, per 100..... 2 00
 Sample frame, with boxes and separators..... 25
 The same, sent by mail, postpaid..... 75

Comb Honey Rack.

The engraving shows the
 Comb Honey Rack as used on
 the Langstroth hives Nos. 2
 and 3. It contains eighteen 2-
 lb. sections, with the outside
 ones (C) glassed; 5 tin separa-
 tors (B), and the wedge (A) to
 tighten or loosen the sections
 for manipulation.

We also make these Racks
 to fit any hive.

In ordering a special size, give only the width of your hive inside,
 and the length of the top-bar of your frames.

Sample Rack, by express, nailed, without sections.....\$ 25

Sample Rack, nailed, with sections, separators and
 glass, complete, by express, crated..... 75

Material for Rack, without sections, by mail..... 75

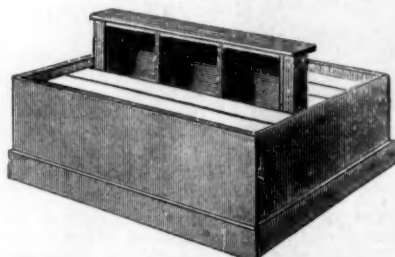
12 Racks, ready to nail..... 1 25

25 " " " "..... 2 50

50 " " " "..... 4 50

Tin Separators for this Rack, per 100..... 2 50

Sections 5¼"x6¼" can be used in both of these surplus stories.

Surplus Story for Comb Honey.

The engraving shows
 the 7-inch story as used
 on the Langstroth hives
 Nos. 4 and 5 (with one
 Wide Frame raised up),
 showing the 3 2-pound
 sections, with a tin separa-
 tor fastened to the
 back of the wide frame.

The upper stories of
 Nos. 7 and 8 are the
 same style as shown
 here; the wide frames
 holding 8 1-lb. sections,
 instead of 3 of the 2-lbs.

We also make this story for Nos. 4 and 5—each wide frame
 holding one row of four 1-lb. sections—at the same price.

SHIPPING CRATES FOR COMB HONEY.

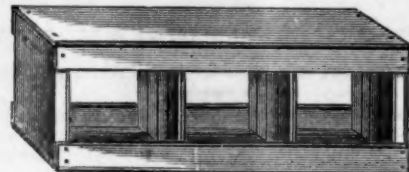
Sample Crate, nailed, containing
 12 sections, without glass, by
 express\$ 40
 Material, ready to nail, 50 Crates. 3 75
 " " " 100 Crates. 6 50
 Glass for these Crates, per 100
 lights 1 00

The Crate shown above holds **twelve one-pound Sections**,
 with glass on the end instead of the side, taking smaller glass, and
 less work on the wood parts. The inside measure is just 12 inches
 long; carrying 2 rows of sections of either width, 6 to the foot or
 7 to the foot. Those using both widths of sections will not require
 two kinds of crates.



The above Crate holds **twenty-four one-pound Sections**
 2 inches wide; (or, sections 1½ inches wide, if so ordered.) The
 side cleats are grooved for glass; and the gross weight will not
 exceed 28 pounds. As the markets now demand small packages,
 this size of crate gives excellent satisfaction.

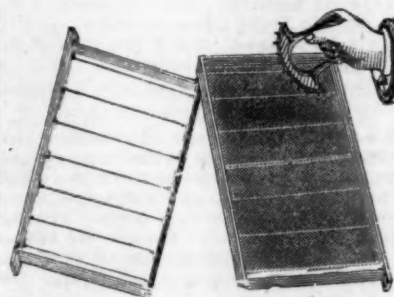
Sample Crate, nailed, containing 24 sections, without
 glass, by express.....\$ 60
 Material, ready to nail, 50 Crates..... 6 00
 " " " 100 Crates..... 11 50
 " " " 1 Crate and 1 Section, by express 15
 " " " by mail, postpaid 70
 Glass for these Crates, per 100 lights..... 2 00



The above Crate will hold **twelve two-pound Sections** of
 honey. Either the Crate or the Sections may be glassed. The
 gross weight of this Crate, when filled with honey, is about 25
 pounds; making it a neat and convenient package for handling
 and shipping.

Sample Crate, containing 12 two-pound Sections, nailed,
 without glass, by express.....\$ 50
 Material, ready to nail, 50 Crates..... 4 75
 " " " 100 Crates..... 9 00
 " " " 1 Crate and 1 Prize Box, by express 15
 The same, sent by mail, postpaid..... 65
 Glass for these Crates, per 100 lights..... 3 00

All these Crates can be furnished, when so ordered, with a
 solid piece of wood for one side, instead of slats grooved for glass,
 without extra charge.

**Wiring Tool,**



FOR
 Pressing Foundation
 INTO
WIRED FRAMES.

SOMETHING
 VERY USEFUL.

Price, by mail, 20c.
 By express, 15c.

| | | |
|-----------------------------|------------|------------|
| In quantities of 1,000..... | 4½x4½..... | 5½x8½..... |
| “ “ 500..... | \$3 50 | \$4 50 |
| “ “ 250..... | 2 00 | 2 50 |
| “ “ 100..... | 1 25 | 1 50 |
| “ “ 50..... | 60 | 70 |

We fill all orders of the above size, and **carry no others in stock.**



The Wakeman & Crocke
PRESS, to be used for pu
ting together One-Piece Sex
tions—at wholesale or retail
Price, **\$2.00** each, by e
press. By the dozen—**\$21**
given upon application



| | Vandervort. | Root. |
|-------------------|--------------|---------|
| 6 inch Rolls..... | \$15 00..... | \$18 50 |
| 10 "..... | 20 00..... | 20 00 |
| 12 "..... | 25 00..... | 30 00 |
| 14 "..... | | 40 00 |

The accompanying illustration gives a good view of these veils as they are worn,—making it a complete face protection. Price, by mail, 30 cents.



Straight Tin Pails for Honey.



These pails have a full cover, and are excellent for selling honey in the home market, and after the honey is candied, it can be shipped anywhere.

All sizes have a bail or handle, and when empty will be found useful in every household.

Assorted samples of the three sizes, put inside of one another as a nest, price 40 cents by express. The following are the prices in quantities:

| | holding 10 lbs. of honey | Per dozen. | Per 100. |
|--------------|--------------------------|------------|----------|
| Gallon, | 5 " " | \$1 80 | \$12 00 |
| Half Gallon, | 5 " " | 1 50 | 9 00 |
| Quart, | 2 1/2 " " | 1 20 | 7 00 |

Tapering Tin Pails for Honey.



It will be noticed that these pails are tapering in shape. All the sizes have a bail, and on the 25-lb. pail a wooden handle is added. These tapering pails are made heavier and stronger than those with the straight sides, the covers are deeper, and the top edge of the pail is doubled over, making it smooth and convenient to handle.

Assorted samples of the five sizes, nested, 75 cents, by express, of the four smaller sizes, 50 cents. Prices in quantities as follows:

| | To hold 1 lb. | 4 lbs. | 7 lbs. | 13 lbs. | 25 lbs. |
|-----------|---------------|--------|--------|---------|---------|
| Per dozen | \$.75 | \$1.25 | \$1.50 | \$2.00 | \$3.25 |
| Per 100 | 5.00 | 8.00 | 10.00 | 14.50 | 23.00 |

WOODEN PAILS FOR HONEY.

Wooden water-pails, well painted outside, with 3 iron hoops and a tight-fitting wooden cover, at \$2.00 per dozen. They hold 25 lbs. of honey, and, when empty, they can be used as an ordinary pail.

Similar Pails to the above, with 2 hoops, well painted, to hold 20 lbs. of honey, at the same price, with a cover that is driven into a croze, making as tight a joint as a head of a keg. These Pails, filled with honey, can be as safely shipped as kegs or barrels.

Red Labels for Pails.

Three sizes, ranging in size for pails to hold from one to ten pounds of honey. Price, \$1.00 for a hundred, with the name and address of the bee-keeper printed on them. Smaller quantities at one cent each; but we cannot print the name and address on less than one hundred. Larger quantities according to size, as follows:

| | Size A. | Size B. | Size C. |
|--------------|---------|---------|---------|
| 250 Labels | \$1 50 | \$2 00 | \$2 25 |
| 500 Labels | 2 00 | 3 00 | 3 50 |
| 1,000 Labels | 3 00 | 4 00 | 5 00 |

Samples of each of the Labels will be sent free, upon application.



YUCCA BRUSH.

For brushing bees from the combs. Price, 5 cents each, or 50 cents per dozen. Postage, 1c. each, extra.

SEEDS for HONEY PLANTS.

| | |
|--|---------|
| White Clover—per lb., 30c—per peck, \$2.75—per bu. (60 lbs.) | \$10 00 |
| Alsike Clover—per lb., 25—per peck, \$2.25—per bushel | 8 00 |
| Mellot or Sweet Clover—per lb., 20c—per peck, \$1.75—per bu. | 6 00 |
| Bokhara Clover—Imported—per pound | 50 |
| Spider Plant—per oz., 20c—per lb. | 2 00 |
| Motherwort—per lb. | 1 00 |
| Cleome, Rocky Mountain Bee-Plant—per lb. | 1 25 |

We keep no seeds in stock except those enumerated above.

IF TO BE SENT BY MAIL, add 10 cents per pound for postage.

The "Globe" Bee Veil

Price, by Mail or Express, \$1.00.

There are five cross-bars united by a rivet through their center at the top. These bars are buttoned to the face-piece by the light spring-steel neck-band is of best hard spring brass. The cover is of white bobinet with black face-piece to see through.

It is very easily put together; no trouble to put on or take off; and folds compactly in a paper box 6x7 inches, by one inch deep. The protection against bees is perfect—the weight of the entire Veil being only five ounces.



IN A RECENT FIRE

The netting of 60 dozens of these Vells were soiled by smoke. These complete Vells we offer, postpaid, at 60 cents each or \$6.00 for \$1.10, if ordered at the same time. They are practically just as good as new, but slightly soiled. To see this Veil and the BEE JOURNAL, write for two NEW subscribers to the BEE JOURNAL—[for one for the BEE JOURNAL, and one for the HOME JOURNAL] for one year, with \$2.00 for the subscriptions.

Hastings' Perfection Bee-Feeder.

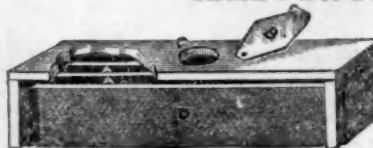
This Feeder will hold one quart, and the letting down of the feed is regulated by a thumb-screw. The cap screws on securely. It is easy to regulate—either a quart or a spoonful—and that amount can be given in an hour or a day, as desired. By it the food can be given where it is most needed—just over the cluster. Not a drop need be lost, and no robber bees can get at it. Price, 40 cts., or a dozen for \$3.50. Postage, 10 cents extra.



Feeder for Top of Hive.

It has two side entrances for the bees, and the cover of the hive is placed to be used on the feeder. It is the full size of the hive, and is filled with the usual partitions on which the bee may travel. It has a large capacity. Price.—Nailed, 50 cents; flat, 35 cents each. When no size is given, we will send them to fit the standard 10 frame Langstroth hive.

Shuck's Bee-Feeder.



A Shuck Feeder may be placed at the entrance of the hive, any time of the day, without danger from robbers; it feeds much of little as may be desired; the feed can be reached by the bees only from the inside of the hive. Price,

by mail, 30 cents. By express, 25 cents each, or \$2.40 per dozen.

WIRE NAILS.

We carry a full line of wire nails, and can fill orders for any quantity promptly. For nailing Sections, Cases, Frames, Racks, Crates, etc., they are very essential.

The entire length of the nail being the same thickness, they do not loosen like ordinary iron nails, and are not as liable to bend or break. They can be easily driven through two pieces of tin.

From the assortment of lengths given in the table below, any kind of nailing may be done, even to making large boxes.

| Length of Nails. | Size of Wire. | NUMBER in one lb. | Price. |
|----------------------------|---------------|-------------------|------------|
| 3/8 inch long, wire No. 20 | 20 | 10,000 | per lb 25c |
| 1/2 " " " " | 19 | 5,330 | " 20c |
| 5/8 " " " " | 18 | 3,500 | " 16c |
| 3/4 " " " " | 18 | 2,750 | " 15c |
| 7/8 " " " " | 17 | 1,780 | " 13c |
| 1 " " " " | 17 | 1,555 | " 12c |
| 1 1/4 " " " " | 16 | 910 | " 10c |
| 1 3/4 " " " " | 16 | 760 | " 10c |
| 2 " " " " | 15 | 435 | " 9c |

If wanted by mail, add 18 cents per pound for postage.

We can furnish larger nails, in 5-pound packages only—up to 5 inches in length—when desired.

Enameled Cloth.

For covering frames. Price per yard (45 inches wide), 20 cents; a whole piece of 12 yards for \$2.25. If ordered by mail, send 15 cents per yard, extra, for postage.

SQUARE HONEY-CANS



The above illustrations show the 60-pound SQUARE HONEY-CANS which are becoming quite popular for shipping extracted honey. They are enclosed in a solid case of wood, and the boxes contain either 1 or 2 Cans, as may be preferred. We can furnish them at the following prices, with a 1 1/4-inch Screw-Cap in the corner of each Can. For the convenience of digging out candied honey, we can furnish these Cans with an additional 4-inch Screw Cap, for 5 cents extra on each Can.

| | |
|--------------------------------|--------------------------------|
| 1 Single Can..boxed..\$.45 | 1 box of 2 Cans\$.75 |
| 12 Single Cans..boxed.. 5.00 | 12 boxes of 2 Cans 8.40 |
| 100 Single Cans..boxed.. 40.00 | 100 boxes of 2 Cans 65.00 |

EXCELSIOR HONEY-EXTRACTOR.

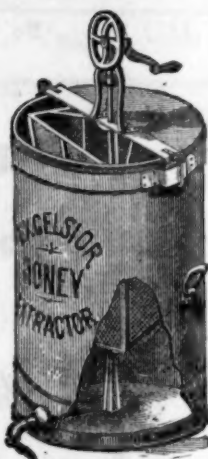
We respectfully refer all who are looking for the best Honey-Extractor, to any one using an Excelsior. The Excelsior honey-extractor can only be equaled by close imitation, and never excelled. It is made entirely of metal, and is consequently very light, strong and durable, with lugs at the bottom for firmly attaching it to the floor, if desired.

| |
|---|
| For 2 American frames, 13x13 inches.....\$ 8 00 |
| For 2 Langstroth " 10x18 " 8 00 |
| For 3 " " 10x18 " 10 00 |
| For 4 " " 10x18 " 14 00 |
| For 2 frames of any size, 13x20 " 12 00 |
| For 3 " " 13x20 " 12 00 |
| For 4 " " 13x20 " 16 00 |

The \$8.00 and \$10.00 sizes are made to accommodate those who desire a cheap but practical machine. The Cans are smaller, the sides of the baskets are stationary, and they have neither covers, strainers, nor metal standards.

The Comb-Basket having vertical sides, insures the extracting power alike for the top and bottom of the frames. The sides of the basket in the \$12.00, \$14.00 and \$16.00 Extractors being movable and interchangeable, greatly facilitates the operation of thoroughly cleaning. The basket can be taken from or replaced in the Can in a moment, there being no rusty nuts to remove, or screws to take out.

At the bottom of the Can, and below the basket, is a cone or metal standard in the \$12.00, \$14.00 and \$16.00 Extractors, in the top of which revolves the bottom pivot of the basket, thereby giving room for 80 to 100 lbs. of honey without touching the basket or pivot below. Cans of the other sizes are shallow.



The \$12.00 size.

Excelsior Wax-Extractor.

We make two sizes, the smaller one having about the capacity of the usual wax-extractors now in use.

The advantages of this extractor are:

1. It is more easily operated, there being no necessity for removing the top to refill it with water.
2. The wax melts more quickly, because it is brought into a more DIRECT contact with the steam.
3. It is more economical, because the steam has access to the center, thereby extracting all the wax from the refuse matter.

The filler for water acts also as an indicator as to the amount of water in the boiler; for when the steam escapes through the filler, more water will be required.

Keep a kettle of hot water ready to fill it when required.

| | |
|------------------------|--------|
| Price, small size..... | \$4 00 |
| " large | 5 00 |



BINGHAM SMOKERS.

The Michigan Bee-Keepers' Association, having all the smokers before it, "pronounced Bingham's Patent Smoker the best."

J. P. Moore, Binghamton, New York, after using one some time, said: "My Smoker troubles are all over, and bee-keepers owe you a debt of gratitude."

Professor Cook, of Michigan Agricultural College, says: "It is the best in the market."

R. M. Argo, Lowell, Kentucky, says: "It is all that any bee-keeper could desire."

Paul L. Viallon, Bayou Goula, La., writes, April 6, 1878: "Your smokers are far superior to any ever invented, and we bee-keepers owe you a vote of thanks for your ingenious invention. Many may try to improve on yours, but I am positive none will make a better one."

This is the first and only bellows Smoker ever made which would burn stove-wood. It burns anything combustible, and needs no care except to be refilled once in one or two hours. Works easy and will throw a stream of smoke ten feet. It will not go out nor wear out. It will save time, stings, and money, and perhaps a valuable horse.



Patented, 1878.

BINGHAM & HETHERINGTON

HONEY KNIVES.

Patented May 20, 1879.



The most extensive Bee-Keepers use them exclusively.

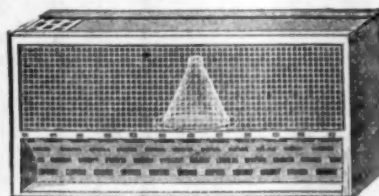
The Knife is so constructed that only the thin beveled edge rests on the combs, and the caps, after being cut off, slide up in large sheets and roll over on the knife, like shavings from a sharp plane. As only the edge of the knife touches the honey, it does not waste and stick like other knives, but glides easily over curves, planes and hollows, leaving the uncapped honey free from caps, and the cells as clean, perfect and smooth as if they had never been capped. They are two inches wide, tempered and finished like a razor, and will last for a life-time.

| | each | per dozen. |
|---|---------------------|------------|
| The Doctor Bingham Smoker..... | 3 1/2 inch, \$2 (X) | \$14.00 |
| The Conqueror Bingham Smoker..... | 3 " | 1 75 13.00 |
| Large Bingham Smoker, wide shield..... | 2 1/2 " | 1 50 11.70 |
| Extra Standard Bingham Smoker, wide shield..... | 2 " | 1 25 9.50 |
| Plain Standard Bingham Smoker, narrow shield..... | 2 " | 1 00 8.00 |
| Little Wonder Bingham Smoker, narrow shield..... | 1 1/4 " | 65 5.00 |
| Bingham & Hetherington Honey Knife..... | 2 " | 1 00 10.00 |

Knives sent by mail, post-paid, at \$1.15 each.

Drone and Queen Trap.

The engraving shows Alley's Combined Drone and Queen Trap, with the perforated-metal entrance, the tin slide, the perforated metal at the top, through which the workers, that enter the trap,



pass out, and also the cone through which the drones or queens pass into the trap. The front of the trap, as will be noticed, is covered with wire cloth.

In using the trap place the open side towards the entrance of the hive; the tin slide which forms the top need not be opened except when a queen is to be released, or drones are to be removed. Arrange the entrance so that all the bees must pass through the wire. Full directions accompany each trap.

Price 50 cents; by mail, 65 cents; 12 in the flat, and one nailed, 13 in all, \$3.50; 50 in the flat, \$12.00.

T-TINS.

Any length, per foot, 1 cent. For Langstroth Hives, 14 inches, cent each.

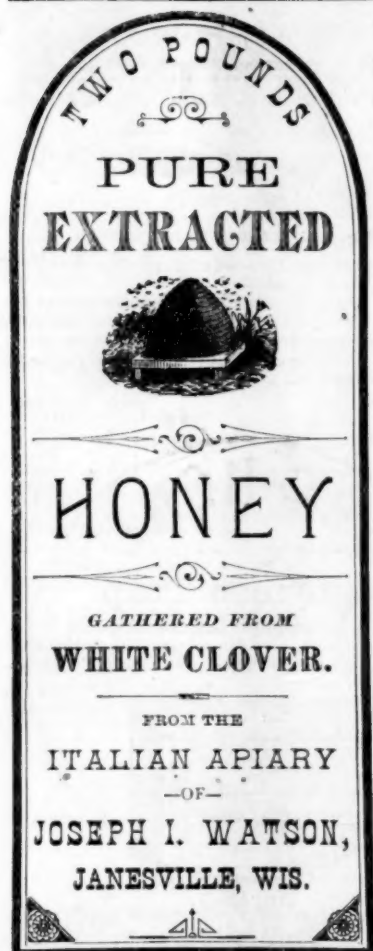
SUPPLIES FOR BEE-KEEPERS—For Sale by Thomas G. Newman & Son, Chicago, Ills.



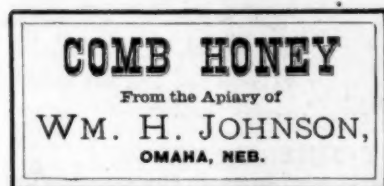
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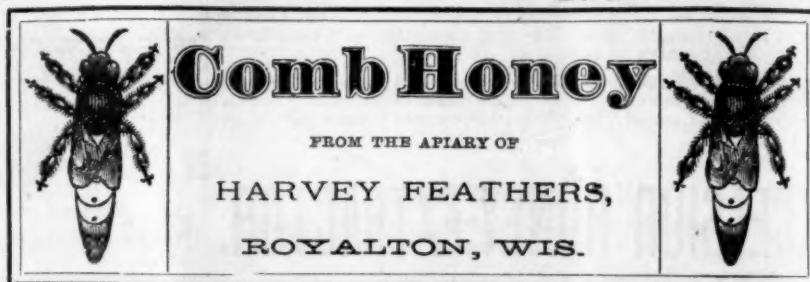
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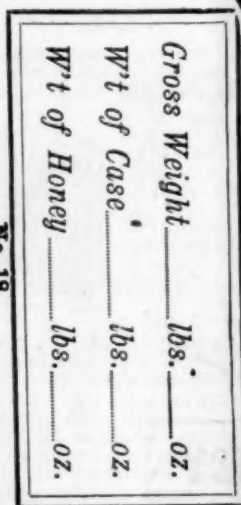
No. 11.



No. 2.



No. 1.



No. 18.



No. 15.



No. 16.

SUPPLIES FOR BEE-KEEPERS—For Sale by Thomas G. Newman & Son, Chicago, Ills.

ONE POUND
PURE
EXTRACTED



HONEY

GATHERED FROM
BASSWOOD.

From the Apiary of
E. T. JORDAN,
HARMONY, IND.

No. 7.

LBS.
PURE
EXTRACTED



HONEY

From the Apiary of
JOHN H. BALL,
Palatine, N. Y.

All pure honey will crystallize, especially if exposed to the cold. Putting the jar in hot water will bring the candied honey to its fluid state without injury.
The corks should be loosened and the water heated gradually, in order not to crack the jar.

No. 4.

PURE HONEY
PUT UP BY
W. W. FISHER,
TOLEDO, OHIO.

No. 10.

PURE HONEY
GATHERED FROM
WHITE CLOVER,
FROM THE APIARY OF
GEO. W. PENN,
BRIDGEWATER, CONN.

This honey is separated from the combs by the Extractor just as it is brought in from the flowers, preserving the respective flavor of each variety. It is not possible in all cases to have the contents of each jar entirely from the blossoms named, yet sufficiently so to give their characteristic flavor.

No. 14.

ONE-HALF POUND
PURE HONEY
G. HART, Kent, O.

No. 12.

**HANDLE WITH
CARE.**

No. 8.

WHITE CLOVER HONEY.

It is not possible in all cases to have the contents of each package entirely from the blossoms named, yet sufficiently so to give distinctly their characteristic flavor.

This honey will candy as soon as cold weather begins and is, in fact, the best proof of its purity. To restore it to the liquid form, set it in a warm oven or on the reservoir of the stove, removing the cover so it will not ooze out. When it is all melted, remove and cover again. Some liquify it by placing the receptacle in hot water, supported on a thin strip of wood.

No. 17.

PURE HONEY
From the Apiary of
JAMES W. HANSON,
CHICAGO, ILL.

No. 3.

WARRANTED
PURE
HONEY
F. A. GIBSON,
RACINE,
Wis.

No. 13.

PURE HONEY

This honey will candy as soon as cold weather begins, and is, in fact, the best proof of its purity. To restore it to the liquid form, set it in a warm oven or on the reservoir of the stove, removing the cover so it will not ooze out. When it is all melted, remove and cover again. Some liquify it by placing the receptacle in hot water, supported on a thin strip of wood.

L. ADAMS,
MAYFAIR, Cook Co.,
ILLS.

No. 19.

TAKE NOTICE.—This honey will candy, or become white and hard, as soon as it becomes cool, or cold weather begins, and this candying is, in fact, the best proof of its purity. To restore it to the liquid form, set it in a warm oven or on the reservoir of the stove, removing the stopper or cover so it will not ooze out. When it is all melted, remove and cork or cover again. If sealed up while quite hot, with a cork dipped in melted wax (or with the inside of the cover waxed), it will usually not candy again. Some liquify it by placing the bottles in hot water. To prevent breaking the glass, let the bottles rest on a thin strip of wood.

No. 9.

As Shown on the two Preceding Pages.

SUPPLIES FOR BEE-KEEPERS—For Sale by Thomas G. Newman & Son, Chicago, Ill.

HONEY AND BEESWAX MARKET.

NEW YORK, June 5.—There is no comb honey on the market, but a small stock of basswood extracted and California; new Southern extracted is arriving, but the quality is mostly inferior. We quote: Extracted basswood and California, 7c; Southern, 65¢@70¢ per gallon. Beeswax, scarce at 26¢@28¢.

HILDRETH BROS. & SEGELKEN,
28-30 West Broadway.

CHICAGO, June 4.—Demand continues good for strictly white clover honey, and our receipts are being taken as fast as they arrive. What little stock we have, consists of buckwheat in 1 and 2-lb. sections, which is dull and slow sale. We quote: White clover 1-lb., 12½¢@13¼¢; buckwheat, 7¢@9¢. Beeswax very scarce at 25¢@26¢ for bright, and 23¢@24¢ for dark. S. T. FISH & CO., 189 S. Water St.

KANSAS CITY, June 10.—We received today the first shipment of new comb honey from Independence, Mo.—nice white 1-pound sections, put up in handsome white crates holding 12 sections each. It sells at 15¢@16¢ per pound. Extracted, white, 5¢@6¢; dark, 5¢. Beeswax, 25¢.

CLEMONS, CLOON & CO.,
Cor. 4th and Walnut Sts.

CHICAGO, June 5.—Demand is now very light for comb honey, and will be for the ensuing two months. There is not much on the market, and very little of it is in desirable shape for the retail trade, being in supers and just as removed from the hive. Best brings 13¢@14¢, and off-grades about 10¢. Extracted, 6¢@8¢. Beeswax, yellow, 27¢@28¢.

R. A. BURNETT, 161 S. Water St.

MILWAUKEE, June 2.—The market for honey is in a fair condition. The old stock is getting out of sight, and values are sustained on choice qualities. We quote: Choice white 1-lb. sections, 13¢@14¢; medium 1-lb., 11¢@12¢; dark 1-lb., 9¢@10¢; 2-lb., normal. Extracted, in barrels and half barrels, white, 7¢@8¢; dark, 6¢@7¢. Beeswax, 26¢@30¢.

A. V. BISHOP, 142 W. Water St.

DETROIT, June 3.—Best white comb honey, 13¢@14¢; other grades, 10¢@13¢. Extracted, slow demand at 7¢@8¢. Beeswax, 27¢@28¢.

M. H. HUNT, Bell Branch, Mich.

KANSAS CITY, June 13.—Market cleaned up on old comb and extracted, and new crop of comb arriving. We quote: White 1-lb., 15¢; dark, 11¢@12¢; white 2-lb., 12¢@13¢; dark, 10¢@11¢. Extracted, white, 6¢@7¢; dark, 5¢. HAMBLIN & BEARSS, 514 Walnut St.

BOSTON, June 19.—Fancy 1-lb., 16¢; 2-lb., 15¢. Extracted, 8¢@9¢. Honey sales are very slow. We have recently received a shipment from Michigan, of very fine stock, which is an ample supply for us for the summer.

BLAKE & RIPLEY, 57 Chatham Street.

CINCINNATI, June 10.—Demand for comb honey is slow, and prices nominal. There is but little on the market. Extracted honey is in good demand at 5¢@8¢, according to quality. We bought today the first 4,000 pounds of new extracted clover honey.

Beeswax is in good demand at 24¢@28¢, for good to choice yellow. C. F. MUTH & SON, Corner Freeman & Central Aves.

Bee-Keeping for Profit, by Dr. G. L. Tinker, is a new 50-page pamphlet, which details fully the author's new system of bee-management in producing comb and extracted honey, and the construction of the hive best adapted to it—his "Nonpareil." The book can be had at this office for 25¢.

READERS

Of this Journal who write to any of our advertisers, either in ordering, or asking about the Goods offered, will please state that they saw the Advertisement in this paper.

A New Method of Treating Disease.
HOSPITAL REMEDIES.

What are they? There is a new departure in the treatment of disease. It consists in the collection of the specifics used by noted specialists of Europe and America, and bringing them within the reach of all. For instance, the treatment pursued by special physicians who treat indigestion, stomach and liver troubles only, was obtained and prepared. The treatment of other physicians, celebrated for curing catarrh, was procured, and so on till these incomparable cures now include disease of the lungs, kidneys, female weakness, rheumatism and nervous debility.

This new method of "one remedy for one disease" must appeal to the common-sense of all sufferers, many of whom have experienced the ill effects, and thoroughly realize the absurdity of the claims of Patent Medicines which are guaranteed to cure every ill out of a single bottle, and the use of which, as statistics prove, has ruined more stomachs than alcohol. A circular describing these new remedies is sent free on receipt of stamp to pay postage, by Hospital Remedy Company, Toronto, Canada, sole proprietors.

51D26t 1mly.

Advertisements.

Dadant's Brood Foundation! CHEAP! Wholesale or Retail. Or will exchange for Comb Honey.

ST. JOSEPH APIARY, ST. JOSEPH, MO.

27A1t Mention the American Bee Journal.

See What I Offer You! Imported Italian Queens, fair, \$4; Select, \$5; \$1 less after Aug. 1. Choice warranted, home-bred Queens, \$1; or 6 for \$5; one doz., \$9.00. This will not appear again. Take notice, and govern yourself accordingly.

27A1t J. B. HAINS, Bedford, Ohio.

Mention the American Bee Journal.

Tested Queens Cheap

During the Swarming Season. Prolific Queens, producing all three-banded workers, \$1.00 each; 6 for \$4.00.

27A2t J. A. GREEN, Dayton, Ills.

Mention the American Bee Journal.

Choicest Italian QUEENS!

September, 1889. NONE BETTER IN AMERICA! Send for Price-List. Order early.

15A1t E. D. KEENEY, importer and Breeder, Arcade, N. Y.

Purely BRED—Purely MATED. Won first premium over all competitors at Buffalo International.

The Lever.

THE NATIONAL
- - - TEMPERANCE NEWSPAPER.

Bright! Newsy! and Enterprising!

YOU SHOULD READ IT.

Send for Sample Copy.

To New Subscribers, Only 50¢ a Year.

This offer closes November 1.

Center-Lever Company,

134 Van Buren Street, CHICAGO, ILL.
13A1t-4M1t

The "Globe" Bee Veil

Price, by Mail or Express, \$1.00.



There are five cross-bars united by a rivet through their center at the top. These bars are buttoned to studs on the neck-band. The bars are of best light spring steel. The neck-band is of best hard spring brass. The cover is of white bobinet with black face-piece to see through.

It is very easily put together; no trouble to put on or take off; and folds compactly in a paper box 6x7 inches, by one inch deep. The protection against bees is perfect—the weight of the entire Veil being only five ounces.

IN A RECENT FIRE

The netting of 60 dozens of these Vells were soiled by smoke. These complete Vells we offer, postpaid, at 60 cents each or two for \$1.10, if ordered at the same time. They are practically just as good as ever, but slightly soiled. To secure these. Order at once.

We will send this Veil and the BEE JOURNAL one year, for \$1.50; or we will give the Veil FREE for two NEW subscribers to the BEE JOURNAL—[or one for the BEE JOURNAL and one for the HOME JOURNAL] for one year, with \$2.00 for the subscriptions.

THOMAS G. NEWMAN & SON,
246 East Madison Street, CHICAGO, ILL.

\$1,000 IN GOLD can be had; \$1.00 bill sent us will bring you in return, prepaid, a Golden Box containing 30 useful articles, together with \$20.00 in C. Money. A sure thing. Address, ART AGENCY, 6M3t-24A6t Box 950, Circleville, Ohio.

Mention the American Bee Journal.

TAKE NOTICE!

BEFORE placing your Orders for SUPPLIES, write for prices on One-Piece Basswood Sections, Bee-Hives, Shipping-Crates, Frames, Foundation, Smokers, etc. Address,

R. H. SCHMIDT & CO.,
1A1Y NEW LONDON, Waupaca Co. WIS.
Mention the American Bee Journal

HONEY ALMANAC!!

JUST the thing needed to create a demand for HONEY at home. Bee-keepers should scatter it freely. It shows the uses of Honey for Medicine, Eating, Drinking, Cooking, for making Cosmetics, Vinegar, etc.; also uses of BEESWAX. Prices, 5 cts.; 25 copies for \$1.10; 50 copies, \$1.70; 75 copies, \$2.30; 100 for \$2.90. The foregoing are POSTPAID prices; following are prices when sent by express or freight; 100 for \$2.50; 500 for \$10.00; 1,000 for \$15.00. The Bee-Keeper's CARD will be printed on the first page without extra cost, when 25 or more are ordered at one time. Address,

THOS. G. NEWMAN & SON,
246 East Madison St., CHICAGO, ILL.

ITALIAN QUEENS From Best of Stock.

Tested, \$1.00 each; Untested, 75 cts.
Address, C. A. BUNCH, Nye, Marshall Co., Ind.
26A3t
Mention the American Bee Journal.

PATENTS!

PATENTS, Caveats, and Trade-Marks procured. Rejected Applications Revived and Prosecuted. All business before the U. S. Patent Office promptly attended to for moderate fees, and no charge made unless Patent is secured. Send for "INVENTOR'S GUIDE."

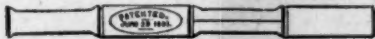
FRANKLIN H. HOUGH,
WASHINGTON, D. C.

31Ctf

Mention the American Bee Journal.

J. FORNCROOK & CO.,
MANUFACTURERS OF THE

"BOSS" ONE-PIECE SECTIONS,



Will furnish you, the coming season, ONE-PIECE SECTIONS, sand-papered on both sides as cheap as the cheapest, and better than the best. Write for prices.
Watertown, Wis., Jan. 1, 1890. 1C1y

Barnes' Foot-Power Machinery.



Read what J. I. PARENT, of CHARLTON, N.Y., says—"We cut with one of your Combined Machines, last winter 50 chaff hives with 7-in. cap, 100 honey-racks, 500 broad frames, 2,000 honey-boxes and a great deal of other work. This winter we have double the amount of bee-hives, etc. to make and we expect to do it with this Saw. It will do all you say it will." Catalogue and Price-List

Free. Address, W. F. & JOHN BARNES,
45Ctf No. 196 Ruby St., Rockford, Ill.



My 22nd Annual Price-List of Italian, Cyprian and Holy-Land Bees-Queens and Nuclei Colonies (a specialty); also Sup-plies will be sent to all who send their names and addresses. H. H. BROWN,
14E4t 23C2t Light Street, Columbia Co. Pa.
Mention the American Bee Journal.

THE "REVIEW."

SOME OF THE TOPICS IT HAS DISCUSSED.
"The Production of Comb Honey," was the special topic of the April number.
"How to Raise Extracted Honey," was discussed in the May issue.
"Comforts and Conveniences for the Apiary," were named and described in June.
"From the Hive to the Honey Market," was the topic of the July issue.
"Marketing," will be the special topic of the August number.
The "Review" is published monthly, at 50 cts. a year. Send for samples (free) and see if you can afford to be without it.
Address Bee-Keepers' Review,
W. Z. HUTCHINSON, Ed. & Prop Flint, Mich.
23Ctf Mention the American Bee Journal

HEAD-QUARTERS IN THE SOUTH.

FACTORY OF

BEE HIVES, & C.

Early Nuclei & Italian Queens.

Tenth annual Catalogue now ready.

5Ctf PAUL L. VIALLOX, Bayou Goula, La.

Scientific Queen-Rearing

AS PRACTICALLY APPLIED;

Being a Method by which the very best of Queen-Bees are reared in perfect accord with Nature's Way; by

G. M. DOOLITTLE.

In this book the author details the results of his Experiments in Rearing Queen-Bees for the past four or five years, and is the first to present his discoveries to the World.

Bound in Cloth—176 pages—Price, \$1.00, postpaid; or, it will be Clubbed with the American Bee Journal one year, for \$1.75; with the Illustrated Home Journal, for \$1.75; or the two Journals and the Book for \$2.50.

THOS. G. NEWMAN & SON,
246 East Madison Street, - CHICAGO, ILL.

British Bee Journal

AND BEE-KEEPERS' ADVISER,

Is published every week, at 6s. 6d. per annum. It contains the very best practical information for the apiarist. It is edited by Thomas Wm. Cowan, F.G.S., F.R.M.S., etc., and published by John Huckle, King's Langley, Herts, England.

PATENT WIRED COMB FOUNDATION

HAS NO SAG IN BROOD FRAMES.

THIN FLAT BOTTOM FOUNDATION

Has no Fish-bone in Surplus Honey.

Being the cleanest is usually worked the quickest of any Foundation made.

J. VAN DEUSEN & SONS,
Sole Manufacturers,
Sprout Brook, Montgomery Co., N. Y.

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